ILLINOIS NATURAL HISTORY SURVEY

Long-Term Illinois River Fish Population Monitoring Program

Annual Report, F-101-R2

Center for Aquatic Ecology

Richard E. Sparks and K. Douglas Blodgett

30 May 1991





F-101-R-2

1990-1991 Annual Progress Report

Long-Term Illinois River Fish Population Monitoring Program

Richard E. Sparks and K. Douglas Blodgett

Illinois Natural History Survey River Research Laboratory of the Forbes Biological Station Post Office Box 599 Havana. Illinois 62644

30 May 1991

R.E. Sparks, Principal Investigator Center for Aquatic Ecology Illinois Natural History Survey

K.D. Bladgett, Co-Royestigator Center for Aquatic Ecology Illinois Natural History Survey

David P. Philipp, Director Center for Aquatic Ecology Illinois Natural History Survey



DISCLAIMER

The findings, conclusions, and views expressed herein are those of the researchers and should not be considered as the official position of the United States Fish and Wildlife Service or the Illinois Department of Conservation:

ACKNOWLEDGMENTS

Project F-101-R is supported by United States Fish and Wildlife Service Sport Fish Restoration Program (Wallop - Breaux) funds administered by the Illinois Department of Conservation. Mr. Larry Dunham, Mr. Bill Bertrand, and Mr. Michael Sweet of the Illinois Department of Conservation, Dr. Lorin Nevling, Chief of the Illinois Natural History Survey, and Dr. David Philipp, Head of the Center for Aquatic Ecology, provided administrative support. Forbes Biological Station staff, Philip Moy, Eric Hopps, Cammy Smith, Dan Holm, and Ruth Sparks, and Long-Term Resource Monitoring Station staff, at Havana, Stephanie Edwards, Paul Raibley, Steve Stenzel, and Edgar Seward, and Aquatic Ecology Center secretary, Beverley Hubert, provided technical or secretarial support. Special thanks are due to Philip Moy who was the crew chief for the field work on the middle and lower portion on the river. Mr. Robert Illyes continued work on the computerization of the database.



TABLE OF CONTENTS

Acknowledge Background Organization Summary of Job 1 Prepo Job 2 Train Job 3 1990 Jobs 4 and	iii iii
Literature	Cited
	Appendix
Appendix A	Index
Appendix A	A-
	Table
Table 1. (Collection Sites
	Figures
Figure 1.	Illinois River Water Surface Elevation5
Figure 2.	Location of the 27 Sampling Stations6
Figure 3.	Fish Collected from the Upper Illinois Waterway
Figure 4.	Weight-Length Relationships and Wr Values of Common Carp
Figure 5.	Weight-Length Relationships and Wr Values of Channel Catfish
Figure 6.	Weight-Length Relationships and Wr Values of White Bass
Figure 7.	Weight-Length Relationships and Wr Values of Largemouth Bass
Figure 8.	Weight-Length Relationships and Wr Values of Smallmouth Bass
Figure 9.	Total Number of Sauger Collected by INHS16



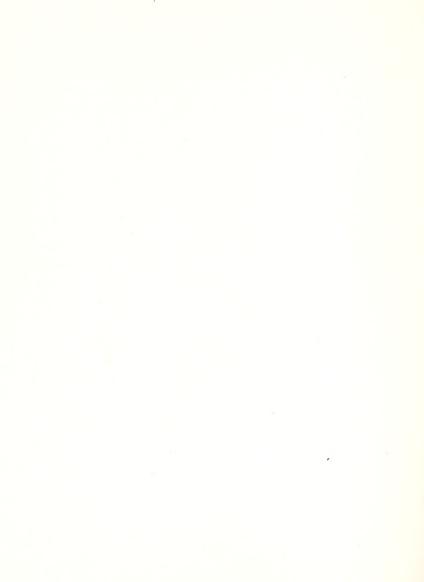
Background

The electrofishing program described in this report adds to a data set begun in 1956 when Dr. William C. Starrett of the Illinois Natural History Survey initiated an annual electrofishing survey of the Illinois River. The survey was supported from a variety of sources until 1985 when funding lapsed. Field work resumed in the fall of 1989 with support from the federal program in sport fish restoration and the Illinois Department of Conservation, as a 5-year Survey and Investigation that extends until 1994.

Organization and Contents of Report

This report is organized according to the 6 jobs described in the Annual Work Plan for Segment 2, and covers the period 1 April 1990 to 31 March 1991. Although a comprehensive analysis of the entire 40-year data set awaits completion of the 5-year investigation in 1994, selected findings are highlighted in each year's annual report. This past year's major findings are reported as Job 6, Presentation of Results, and are briefly summarized below.

The numbers, lengths, and weights of each species of fish caught in 1990 are presented by sampling station in Appendix A. The collections are presented in order by sampling date, and are cross-indexed by location (see the index at the beginning of Appendix A). The Appendix is 76 pages long, and was not attached to all copies of the annual report to save copying and mailing expenses. Copies are available from the Principal Investigator, Dr. Richard E. Sparks, Illinois Natural History Survey; Mr. William Bertrand, Project Officer, Illinois Department of Conservation; and Mr. Jim Allen, Head of the Programs Section, Illinois Department of Conservation. Data are also available for IBM PCs on floppy disks in RBase for DOS.



Summary of Major Findings in 1990

The analysis this year focused on the upper Illinois River where the fish populations have been affected adversely in the past by waste discharges from the Chicago-Joliet metropolitan area, but where game fish populations seem to be recovering as waste treatment improves.

The condition of largemouth bass, smallmouth bass, white bass, and carp, as measured by relative weight, Wr, improved between 1982 and 1985 in the upper Illinois River, but declined by 1989. Wr of the three basses were all above 1.0 by 1985. In contrast, the Wr of channel catfish peaked earlier, at slightly better than 1.0 in 1983, and has since declined to just above 0.8.

Another indicator of a long-term improvement is the development of a sport fishery for sauger in the upper Illinois River. Sauger first appeared in substantial numbers in our catch in 1979 in the upper river, confirming that return of the sauger is a relatively recent event that appears to be associated with water quality improvements made during the decade of the 1970's, starting with the Clean Water Act of 1972.

Although the increased catch of sauger and the improvement in Wr of 4 of 5 species over the last 10 years are encouraging, the decline in Wr values between 1985 and 1989, and the further decline in 1990, are worrisome, particularly since 2 other agencies have obtained similar findings. The Illinois Department of Conservation has noted the same decline in several species of game fish in their electrofishing collections from the river in 1989 and 1990, and Southern Illinois University reports a decline in the Wr of sauger (personal communication, Dr. Roy Heidinger, Professor of Fisheries, Department of Zoology, Southern Illinois University, Carbondale, Illinois, 9 April 1991).

Representatives from all three agencies met in Springfield on 9 April 1991, with representatives from the Illinois Environmental Protection Agency and the Metropolitan

Water Reclamation District of Greater Chicago to discuss possible causes of this decline and to coordinate a more intensive sampling of water quality in 1991. Thus these data sets, including the set from this project, F-101, have demonstrated their utility by providing early warning of a potential problem. It may be possible to identify the cause and take corrective action before the condition of the fish populations in the upper Illinois River revert to the lows that were characteristic of the 1960s.

Job 1. Preparation of Equipment

All old equipment was checked and refurbished as needed. A second timer was added to the control console so that the driver does not have to look to the side at the switchbox to see how long the generator has been running. The old Homelite generator was tuned up and used throughout this sampling season. We measured the voltage to each electrode at the beginning and end of each sampling run to ensure that the output was consistent.

The new MultiQuip generator was modified to serve as an emergency backup, but did not have to be used this year. Mr. K. Douglas Blodgett constructed a resistor box to reduce the voltage of the MultiQuip to the same level as the old Homelite. He also added safety features recommended in the electrofishing school taught by the U.S. Fish and Wildlife Service.

Job 2. Training Staff

Mr. Phillip Moy, Mr. Eric Hopps, and Ms. Ruth Sparks read the procedures manual and practiced with the equipment in the Illinois River at Havana, under the supervision of Dr. Richard E. Sparks and Mr. K. Douglas Blodgett. All staff had previously taken a Red Cross First Aid and CPR course.

Job 3. 1990 Electrofishing

Water levels in the Illinois River were high much of the summer (Figure 1). By 7 September, water levels in the upper river were close to the mean low river stage, so we began electrofishing that part of the river first. All 26 stations on the Illinois River and the one station on the Mississippi at Brickhouse Slough were sampled by 28 September (Figure 2 and Table 1).

Small fish which could not be positively identified in the field were preserved in formalin and brought back to the Laboratory. They were transerred to alcohol and identified during the winter.

Several interesting observations were made during the course of the field work. Yellow perch were extremely rare in collections made years ago, but this year 2 were captured at Ballard Island Chute. Most of the goldfish had the "wild type" bronze coloration, rather than the white, black, or bright orange characteristic of the "dime store" varieties. The bright colors are probably rapidly selected out of the population now by predators, whereas the predators were virtually absent from the upper river 15 years ago. We saw some "knothead" carp, but the incidence is much lower than formerly. Erosion of fins and barbels on the ventral side of bottom-dwelling fishes is still a problem, indicating some sort of stressor associated with the sediment. An anomalous collection was made at Hennepin Island Chute, where only 2 fish were taken in 0.33 hours of electrofishing. The equipment seemed to be working properly, and the abundance of fish in collections made at the stations above and below Hennepin were about as expected. The generator labored when the electrodes were switched on (as it is supposed to under demand) and the voltages to each electrode were in the normal range. It is possible that fish had abandoned the chute because of some noxious material. No dead fish were observed on the shoreline.

Water surface elevation of the Illinois River at Havana in 1990. Figure 1.

Horizontal lines indicate pool stage and flood stage. At pool stage, that there were problems in reading the gage or there were reportthe water level is maintained at a minimum depth for commercial with the U.S. Army Corps of Engineers at the time this report was boat traffic by the navigation dam at La Grange. At flood stage, Electrofishing was conducted during the period indicated by the ing errors. We were still trying to confirm the January readings horizontal bar. It is unlikely that the water levels fluctuated as rapidly in January as indicated by the graph. It is more likely the river overtops its banks and begins to fill the floodplain. being written.

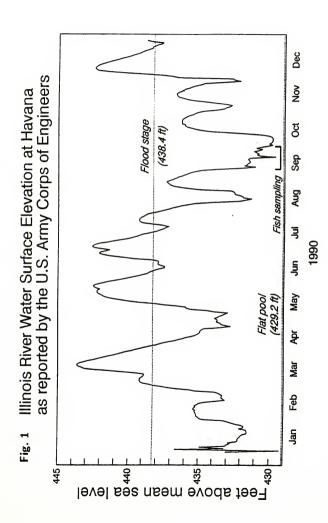
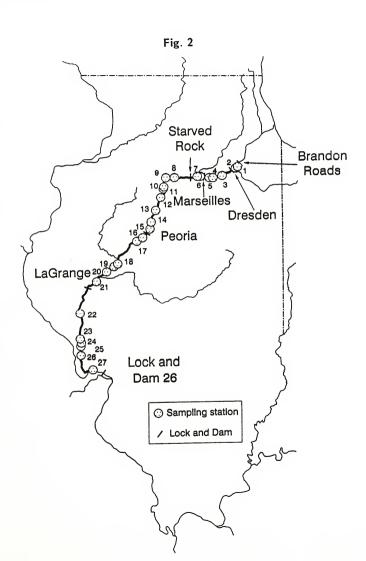


Figure 2. Location of the 27 sampling stations along the Illinois Waterway. Station 27 is in the Mississippi River, just below the mouth of the Illinois River. Stations I and 2 are in the Des Plaines River, which joins with the Kankakee to form the Illinois River. In this report, we define the upper reach of the Illinois Waterway as beginning at River Mile 190, just upstream of Peoria. Stations I through 12 are in the Upper Illinois Waterway.



^aCollection 1990-26 was from Brickhouse Slough on the Mississippi River

							name to		Vater			Conduction	<u>.</u>
number	Date Pool	8	site	River	River mile	time (hrs)	S	Velocity (ft/sec)	temperature DD Secchi vity (degrees C) (mg/l) (inches) (µmhos) Volts	8 §	Secchi (inches)	vity (pumhos)	Volts
1990-01	07-Sep	m	Treats Island	279.4	280.0	1.8	11:55	9.0	8.5	7.73	8.2	8	12
1990-02	07-Sep	m	Mouth of DuPage River	8.9/2	277.8	1.00	13:30	0.3	27.2	9.40	24.0	9	8
1990-03	08-Sep	4	Veupecan Island	2,092	261.1	1.00	8:54	1.9	25.5	7.85	22.6	679	8
1990-04	08-Sep	4	Johnson Island	5,69.6	249.8	0.47	12:38	9.0	27.0	8.70	19.7	630	56
1990-05	08-Sep	4	Bellards Island	247.7	2.8.2	0.55	14:45			10.50	11.8	640	Ē
90-06	10-Sep	'n	Bulls island Bend	241.1	241.6	0.32	15:00	1.2	28.5	9.70	20.1	650	ħ
1990-07	10-Sep	'n	Bulls island	240.2	540.9	79.0	16:40	Ξ	28.0	10.30	18.1	650	Ę
1990-08	11-Sep	•	Clark island	214.9	215.6	79.0	8:59	1.0	26.5	7.80	16.9	650	2
1950-09	11-Sep	•	Hennipen Island	207.5	208.1	0.30	10:30	1.0	26.5	8.04	14.2	989	8
18%-10	11-Sep	9	Upper Twin Sisters	203.0	203.5	97.0	11:50	9.0	27.0	7.70	14.2	920	28
1990-11	11-Sep	9	Lower Twin Sisters	202.6	203.2	0.47	13:05	9.0	27.0	8.10	15.0	670	25
1990-12	11-Sep	9	Henry Island	193.3	194.5	0.51	16:31	9.0	27.0	12.30	11.8	989	185
1993-13	11-Sep	9	Chillicothe island	180.1	181.0	9.65	18:55	0.5	27.0	8.20	9.6	069	25
1990-14	12-Sep	9	Lower Peoris Lake	163.0	163.5	0.57	12:45	0.0	27.0	13.00	9.8	920	፳
1993-15	12-Sep	•	Upper Peoria Lake	170.8	170.9	0.31	14:50	0.0	29.5	9.61	7.9	8	Ę
1993-16	13-Sep	^	Pekin	154.5	154.9	0.53	8:38	9.0	26.5	6.90	8.7	90	281
1999-17	13-Sep	_	Turkey istand	148.0	148.4	27.0	10:15	8.0	27.0	6.80	8.7	200	80
1995-18	13-Sep	7	Upper Bath Chute	112.8	113.2	0.62	13:55	1.3	28.0	8.8	7.9	ě	8
1992-19	13-Sep	^	Lower Bath Chute	107.0	107.3	0.57	16:02	1.0	27.0	5.80	6.7	200	185
1993-20	13-Sep	^	Sugar Creek Island	7.7	96.3	0.61	18:25	9.0	27.0	5.40	7.1	92	8
19:0:-51	14-Sep	٧	Grape-Bar Islands	85.7	87.0	0.73	9:35	9.0	26.0	5.3	7.5	620	8
1993-22	14-Sep	80	81g Blue Island	57.8	59.0	0.87	13:15	2.1	26.0	5.3	7.1	92	200
1950-23	27-Sep	60	Crater-Willow Islands	29.5	30.8	0.50	11:40	1.3	18.5	7.50	11.0	9	8
1990-24	27-Sep	•0	Hurricane Island	27.0	27.9	0.97	13:42	0.7	20.0	9.10	11.4	280	8
52-0%1	27-Sep	80	Mortland Island	18.3	18.8	1.00	17:20	6.0	20.0	07.6	10.6	99	8
92-066	28-Sep	23	Brickhouse Slough	207.2	209.0	1.00	9:45	0.1	20.5	10.30	16.9	375	210
22:55	28-Sen	~	Oant Church	7 76	,								

Another discouraging observation is the degree of sedimentation. It was impossible to fish the exact locations sampled in the past at Ballard Island Chute and Detweiller Marina because the boat became stranded. These 2 stations will have to be abandoned and alternative sites picked for 1991. A third station, Turkey Island Chute, changed from a deep to a shallow chute approximately 15 years ago, when it apparently was filled with sandy dredge spoil. The on-site dredge spoil inspection teams will probably avert another Turkey Island Chute. However, gradual filling of some of the remaining side channels and backwaters will continue unless remedial action, such as proposed for a few locations under the Environmental Management Program, is undertaken. Hurricane and Diamond Island chutes in the lower Illinois River remain deep and generally have good fish populations year to year. These chutes have a fairly uniform width and moderate current velocity, and appear to be self-scouring. The same design might be self-maintaining if copied in other parts of the river.

Jobs 4 and 5. Database

Mr. Robert Illyes has made considerable progress at the Survey's main office in Champaign on merging the historical data sets and making them available in an RBase format that will run on an IBM PC. This has not been an easy task because the coding differs markedly between the Starrett-Sparks data set and the set collected by Kenneth Lubinski. During the past 15 years the mainframe computers and the software used for data analysis at Champaign have changed at least twice, adding further incompatibilities and complications.

The historical data are being converted to coding and formats that are consistent with this project (F-101-R), which began in 1989.

Mr. Illyes is developing checking routines that will find obvious errors, such as a I-inch fish that is listed as weighing 2 pounds, but it may still be necessary to complete one more round of verification by laboriously checking printouts against the original

field data sheets.

Job 6. Presentation of Results

Results from this project were included in a talk presented at the 29th annual meeting of the Illinois Chapter of the American Fisheries Society in Urbana, Illinois on 6 March 1991, and were presented at a meeting of fishery biologists and environmental engineers concerned with the relationships between water quality and the status of fish populations in the Upper Illinois Waterway in Springfield on 9 April 1991. The general increase in relative weight of 5 species of fish, including 4 sport species, from 1982 to 1985 was good news for the fishery managers and water quality managers, as was the appearance of substantial numbers of sauger in the catch, starting in 1979. However, recent declines in relative weights of the same species, including sauger, prompted the Illinois Department of Conservation (IDOC) to call the meeting in Springfield, which was attended by Dr. Sparks and Mr. K. Douglas Blodgett from the Illinois Natural History Survey, and by representatives from the Illinois Environmental Protection Agency, the Cooperative Fisheries Unit at Southern Illinois University, and the Metropolitan Water Reclamation District of Greater Chicago. The information on relative weights and sauger catch that was presented at these meetings is summarized below and in the accompanying figures.

Relative Weight, Wr. The standard length-weight relationships used for comparison with the values from the Upper Illinois River were taken from sources cited in Murphy, Willis and Springer (1991) and listed in their Table 1: Stephen (1978) for carp, Anderson (1980) for channel catfish and smallmouth bass, Brown and Murphy (in press) for white bass, and Wege and Anderson (1978) for largemouth bass.

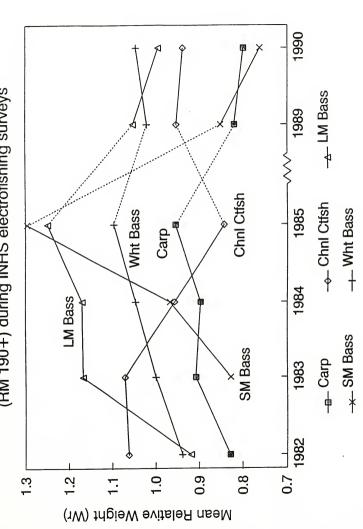
The relative weights of white bass, smallmouth bass, and largemouth bass increased to values greater than 1.0 between 1982 and 1985 (Figure 3). The greatest increase occurred in smallmouth bass, whose Wr values went from approximately 0.8 in 1983 to 1.3 in 1985. No electrofishing was done from 1986 through 1988, so we do not know what happened to the Wr values in this interval. However, the values for all three species were lower in 1989-1990 than in 1985. Changes in weight-length relationships, including Wr, can reflect changes in the food supply, water quality, habitat quality, or in the length range of the fish. One might speculate that these three species may show the same pattern because they have similar feeding habits: they consume invertebrates when young and graduate to larger prey, primarily fish, as adults.

The hypothesis that the quality or abundance of forage for adult sport fish might explain the common downward trend does not explain why the common carp, a bottom-feeding omnivore that is capable of consuming detritus, shows the same pattern. Also, the channel catfish shows a unique pattern: its Wr value peaked in 1983, declined through 1985, and is at an intermediate level in 1989-1990. The channel catfish is an omnivore that consumes benthic macroinvertebrates, but will also take small fish. Without information on populations of forage organisms, including benthic macroinvertebrates, it is virtually impossible to test the food deficiency hypothesis.

There is a suggestive negative correlation between Wr values and ammonia concentrations in the Upper Illinois River (personal communication, 9 April 1991, Mr. William Bertrand, Streams Program Administrator, Illinois Department of Conservation). The un-ionized form of ammonia is toxic to fish and other aquatic animals. The concentration of municipalities and industries in the Chicago-Joliet discharge ammonia, as well as nitrogen-containing organic matter that accumulates in sediment deposits and

Relative weight, Wr, of common carp, channel catfish, white bass, smallmouth bass, and largemouth bass collected from the upper Illinois Waterway, 1982-1990. No electrofishing was conducted from 1986 through 1988. Figure 3.

Fish collected from the Upper Illinois Waterway (RM 190+) during INHS electrofishing surveys Fig. 3



could form ammonia under anaerobic conditions. Again, more information is needed to determine whether this correlation is coincidental or causal. Virtually any pollutant that occurs in sewage or industrial effluent will occur in higher concentrations in the upper river, near the sources, than farther downstream, so ammonia is only one suspect.

In order to determine whether the slight declines we observed in Wr values between 1989 and 1990 might be attributable to different length ranges of fish captured in the two years, the weight-length values were plotted and visually examined (Figures 4-8). With the exception of smallmouth bass, the lengths in the two years overlap and are in the same range. Too few smallmouth bass were captured in the Upper River in 1990 to make a valid comparison of Wr values (Figure 8).

Sauger. Although the sampling design of the long-term electrofishing program is biased against sauger and walleye (no tailwaters are sampled and no night electrofishing is done), it is gratifying to note that the increased catch of sauger, starting in 1979, is verified independently by the IDOC sampling program and by the development of a sport fishery for sauger in the Upper Illinois River (Figure 9). Fish sampling begun in 1990 as part of the Long Term Resource Monitoring Program (LTRM) likewise shows that a substantial population of sauger occur in the La Grange Pool of the Illinois River, just below the navigation dam at Peoria (Figure 1). Although the increased catch of sauger, like the Wr values, shows an improvement in the fish populations that may be related to improved water quality in the last decade, the recent decline in numbers of sauger and in Wr since 1985 may be an early warning of impending problems, and an incentive to determine and correct the causes.

Figure 4. Weight-length relationships and Wr values of common carp taken from the Upper Illinois Waterway in 1989 and 1990. SD = standard deviation of Wr values.

Figure 5. Weight-length relationships and Wr values of channel catfish taken from the Upper Illinois Waterway in 1989 and 1990. SD = standard deviation of Wr values.

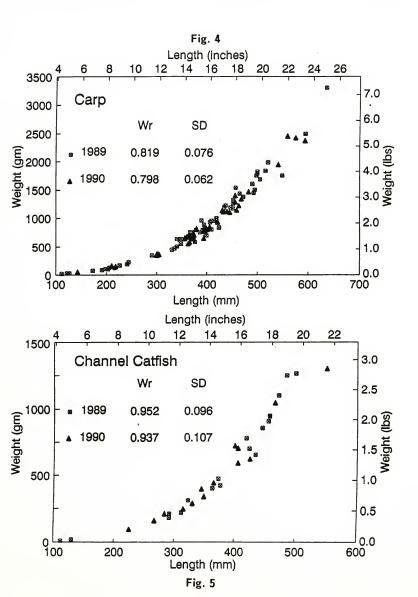
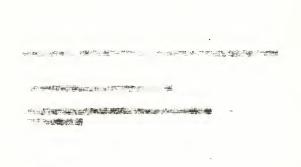


Figure 6. Weight-length relationships and Wr values of white bass taken from the Upper Illinois Waterway in 1989 and 1990. SD = standard deviation of Wr values.



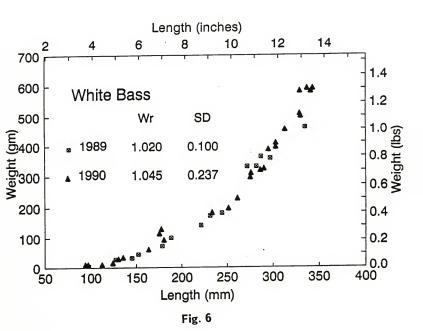


Figure 7. Weight-length relationships and Wr values of largemouth bass taken from the Upper Illinois Waterway in 1989 and 1990. SD = standard deviation of Wr values.

Figure 8. Weight-length relationships and Wr values of smallmouth bass taken from the Upper Illinois Waterway in 1989 and 1990. SD = standard deviation of Wr values.

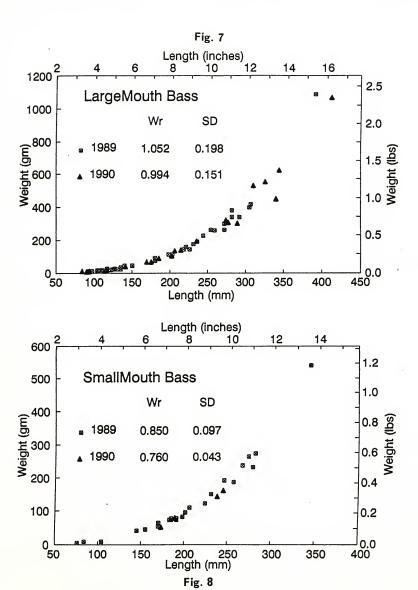


Figure 9. Total number of sauger collected during annual electrofishing surveys of the Illinois Waterway. The total hours fished were roughly the same each year. Zeros indicate that electrofishing was conducted and no sauger were taken. NF means that no electrofishing was done, either because of high water or lack of funding.

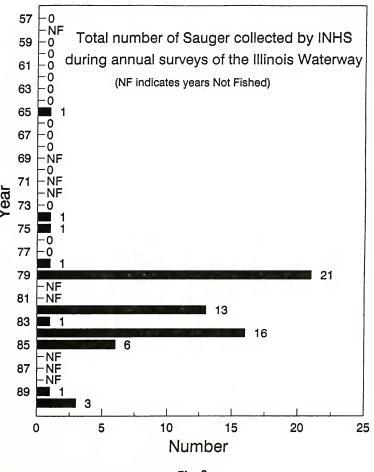


Fig. 9

LITERATURE CITED

- Anderson, R.O. 1980. Proportional stock density (PSD) and relative weight (Wr): interpretive indices for fish populations and communities. Pages 27-33 in S. Gloss and B. Shupp, eds. Practical fisheries management: more with less in the 1980's. New York Chapter American Fisheries Society, Bethesda, MD.
- Brown, M.L., and B.R. Murphy. In press. Standard weight (Ws) development for striped bass, white bass, and hybrid striped bass. North American Journal of Fishery Management 11.
- Murphy, Brian R., David W. Willis, and Timothy A. Springer. 1991. The relative weight index in fisheries management: status and needs. Fisheries 16(2):30-38.
- Stephen, J.L. 1978. Marketable fisheries investigations. Kansas Fish and Game Commission, National Marine Fisheries Service Project 2-272-R, Final Report, Pratt.
- Wege, G.J., and R.O. Anderson. 1978. Relative weight (Wr): a new index of condition for largemouth bass. Pages 79-91 in G. Novinger and J. Dillard, eds. New approaches to the management of small impoundments. American Fisheries Society, North Central Division. Special Publication 5. Bethesda. MD.

 $\qquad \qquad \text{Index to Appendix A}$ (Collections are numbered in order by date of collection)

Collection 1990-	Collection Site	River miles	Collection Date	Page
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	Treats Island Mouth of DuPage River Waupecan Island Johnson Island Ballards Island Bulls Island Bulls Island Clark Island Hennepin Island Upper Twin Sisters Lower Twin Sisters Henry Island Chillicothe Island Lower Peoria Lake Upper Peoria Lake Upper Peoria Lake Upper Bath Chute Lower Bath Chute Lower Bath Chute Sugar Creek Island Grape-Bar Islands Big Blue Island Crater-Willow Islands Hurricane Island Mortland Island Brickhouse Slough, Miss.	279.4 - 280.0 276.8 - 277.8 260.2 - 261.1 249.6 - 249.8 247.7 - 248.2 241.1 - 241.6 240.2 - 240.9 214.9 - 215.6 207.5 - 208.1 203.0 - 203.5 202.6 - 203.2 193.3 - 194.5 180.1 - 181.0 163.0 - 163.5 170.8 - 170.9 154.5 - 154.9 148.0 - 148.4 112.8 - 113.2 107.0 - 107.3 95.7 - 96.3 85.7 - 87.0 57.8 - 59.0 29.2 - 30.8 27.0 - 27.9 18.3 - 18.8 800-	09/07/90 09/07/90 09/08/90 09/08/90 09/08/90 09/10/90 09/11/90 09/11/90 09/11/90 09/11/90 09/11/90 09/11/90 09/11/90 09/12/90 09/12/90 09/13/90	A-4 A-8 A-11 A-13 A-16 A-18 A-20 A-23 A-24 A-26 A-31 A-31 A-35 A-38 A-41 A-43 A-46 A-59 A-59 A-61 A-64
27	Dark Chute	24.4 - 25.5	09/28/90	A-73

Lepomis macr bluegill	rochiru	3					T	otal	Mean	ı	
-		Numl	ber	Length	Rai	nge	W	eight	Weigh	t	Dispositio
		:	1	5.75	-0-	-		0.14	0.14	0	released
Total	Number	r: :	1 1	lumber/h	r:	1.0	Wt:	0.14	Wt/hr:	٥.	140
Pimephales r											
bluntnose mi	nnow	Numb	er	Length	Rai	nge		otal sight	Mean Weigh		Dispositio
			B 1	1.54	3. -0-	. 07		0.04	0.00	5	preserved preserved
Tota1	Number	r: 9	9 1	Number/h	r:	9.0	Wt:	0.04	Wt/hr:	٥.	040
Cyprinus car carp	rpio							otal	Mean		
		Num	ber —	Length	Rai	nge	W	eight	Weigh	t	Dispositio
		1		14.37	-0-			1.27	1.27		released
		1	1	14.65	-0-			1.40	1.40		released
		- 1		15.63	-0-			1.73	1.64		released released
		- 1		17.95	-0-			3.07	3.07		released
		1		18.07	-0-			2.50	2.50		released
			ι 	22.64	-0-	-		5.32	5.32	0	released
Total	Number	: 7	7 1	lumber/hi	::	7.0	Wt:	16.93	Wt/hr:	16.	930
Cyprinus car		Caras	ssiv	s auratu	15						
carp x goldf	ish	Numb		Length	D			otal	Mean		n
		- Trumb	761	Deligui	Kai	ige		aight	Weigh	_	Disposition
		1	L	9.33	-0-	-		0.46	0.46	0	released
		1		9.69	-0-			0.48	0.48		released
		1	L 	12.56	-0-	•		1.07	1.07	0	released
Total	Number	: 3	3 1	lumber/hi	::	3.0	Wt:	2.01	Wt/hr:	ź.	010
Notropis ath		les									
emerald shir	ner	Numb	er	Length	Rar	ige '		otal sight	Mean Weigh		Disposition
		2		3.43		90		-0-	-0-	_	preserved
		1	L	3.46	-0-	•		-0-	-0-		released
				umber/hr							

Page A- 2

		-			-		
Carassius au	ratus						
goldfish					Total	Mean	
gordrism		Number	Length Ra	ange	Weight	Weight	Disposition
			Derigen No				
		1	6.93 -0	٠	0.24	0.240	released
		ī	7.48 -0		0.27	0.270	released
		i		0-	0.32	0.320	released
		1	0.39 -	J-	0.32	0.320	
Total	Number	: 3 1	Number/hr:	3.0	Wt: 0.83	Wt/hr: 0.	830
Notemigonus		ucas			m-4-1	Mean	
golden shine					Total		Disposition
		Number	Length Ra	ange	Weight	Weight	DISPOSICION
		1	5.04 -0	0-	0.04	0.040	released
			5.04 -	<u> </u>	0.04	0.040	16168864
Total	Number	: 1 1	Number/hr:	1.0	Wt: 0.04	Wt/hr: 0.	040
Lepomis cyar	ellus						
green sunfis					Total	Mean	
groom sumri		Number	Length R	ange	Weight	Weight	Disposition
			20119 011 111				
		1	1.61 -	0-	-0-	-0-	released
		ī		0-	-0-	-0-	released
		ī		ō-	-0-	-0-	released
		ī		ŏ-	0.01	0.010	released
		6		4.02	0.19	0.032	released
		ĭ		0-	0.04	0.040	released
		ī		ŏ-	0.06	0.060	released
		ī		0-	0.13	0.130	released
				0-	0.15	0.150	released
		1		0-	0.13	0.120	released
			5.71	U-	0.12	0.120	16164364
Total	Number	: 15	Number/hr:	15.0	Wt: 0.70	Wt/hr: 0.	700
Dorosoma cer	20012200						
					Total	Mean	
gizzard shad		Number	Length R	ange	Weight	Weight	Disposition
		"dmper	Deligen R		Height		
		1	7.13 -	0-	0.17	0.170	released
		1		0-	0.17	0.170	released
		i		0-	0.19	0.190	released
		i		0-	0.23	0.230	released
		i		0-	0.24	0.240	released
				0-	0.24	0.280	released
		1		0- 0-	0.28	0.270	released
		1				0.360	released
		1		0-	0.36		released
		1		0-	0.33	0.330	released
		1		0-	0.36	0.360	released
		1		0-	0.25	0.250	
		1		0-	0.37	0.370	released
		1		0-	0.38	0.380	released
		1		0-	0.29	0.290	released
		1		0-	0.42	0.420	released
		1	11.93 -	0-	0.55	0.550	released
		1	12.72 -	0-	0.55	0.550	released

Micropterus salm largemouth bass	Number	Length	Range	Total Weight	Mean Weight	Disposition
	1	3.07	-0-	-0-	-0-	released
	1	3.11	-0-	-0-	-0-	released
	1	3.54	-0-	0.01	0.010	released
	1	13.39	-0-	0.98	0.980	released
Total Num	ber: 4 N	Tumber/hi	r: 4.0	Wt: 0.99	Wt/hr: 0	.990
Lepomis megaloti	s					
longear sunfish				Total	Mean	
	Number	Length	Range	Weight	Weight	Disposition
	1	2.99	-0-	0.02	0.020	preserved
	ĩ	3.54	-0-	0.03	0.030	preserved
Total Num	1	3.54 Number/hi		0.03 Wt: 0.05	0.030 Wt/hr: 0	•
Ambloplites rupe	1 ber: 2 N			Wt: 0.05	Wt/hr: 0	•
	1 ber: 2 N		r: 2.0			•
Ambloplites rupe	ber: 2 N	lumber/hi	r: 2.0	Wt: 0.05	Wt/hr: 0	.050 Disposition
Ambloplites rupe	ber: 2 N stris	lumber/hi	r: 2.0	Wt: 0.05 Total Weight	Wt/hr: 0 Mean Weight	.050
Ambloplites rupe rock bass	ber: 2 Nestris Number	Length	Range	Wt: 0.05 Total Weight 0.04	Wt/hr: 0 Mean Weight 0.040	Disposition preserved released
Ambloplites rupe rock bass Total Num	ber: 2 N stris Number 1 1 ber: 2 N	Length 4.37 6.69	Range	Total Weight 0.04 0.24	Mean Weight 0.040 0.240	Disposition preserved released
Ambloplites rupe rock bass Total Num	ber: 2 N stris Number 1 1 ber: 2 N	Length 4.37 6.69	Range -0- -0- c: 2.0	Wt: 0.05 Total Weight 0.04 0.24 Wt: 0.28	Wt/hr: 0 Mean Weight 0.040 0.240 Wt/hr: 0	Disposition preserved released
Ambloplites rupe rock bass Total Num	ber: 2 N stris Number 1 1 ber: 2 N	Length 4.37 6.69	Range -0- -0- c: 2.0	Total Weight 0.04 0.24 Wt: 0.28	Wt/hr: 0 Mean Weight 0.040 0.240 Wt/hr: 0	Disposition preserved released
Ambloplites rupe rock bass Total Num	ber: 2 N stris Number 1 1 ber: 2 N	Length 4.37 6.69	Range -0- -0- c: 2.0	Wt: 0.05 Total Weight 0.04 0.24 Wt: 0.28	Wt/hr: 0 Mean Weight 0.040 0.240 Wt/hr: 0	Disposition preserved released

Total for 1990- 1 Number: 68 Number/hr: 68.00 Wt:27.5 Wt/hr:27.45

ection 1990- ver mile 276.			DuPage River Collection date	e: 09/07/9	0 Run =	1.00 hrs
Lepomis macr	ochirus			Total	Mean	
bluegill	N	umber	Length Range	Weight	Weight	Disposit
	_	1	2.24 -0-	-0-	-0-	released
		1	4.84 -0-	0.08	0.080	released
		1	5.28 -0-	0.12	0.120	released
		1	5.63 -0-	0.12	0.120	released
		1	5.75 -0-	0.13	0.130	released
		1	6.06 -0- -00-	0.16 0.10	0.160 0.100	released
	_					
Total	Number:	7 1	Number/hr: 7.0	Wt: 0.71	Wt/hr: 0.	710
Pimephales n						
bluntnose mi		umber	Length Range	Total Weight	Mean Weight	Disposit
		8	1.97 2.80 2.83 -0-	0.04	0.005	preserve
Total	Number:	9 1	Number/hr: 9.0	Wt: 0.04	Wt/hr: 0.	040
Cyprinus car	pio					
carp	N	umber	Length Range	Total Weight	Mean Weight	Disposit
	_	1	8.27 -0-	0.33	0.330	released
		ī	8.58 -0-	0.31	0.310	released
		ī	13.98 -0-	1.40	1.400	released
		ī	14.92 -0-	1.78	1.780	released
		1	16.93 -0-	2.48	2.480	released
Total	Number:	5 1	Number/hr: 5.0	Wt: 6.30	Wt/hr: 6.	300
Ictalurus pu						
channel catf				Total	Mean	
	N	umber	Length Range	Weight	Weight	Disposit
		1	12.40 -0-	0.53	0.530	released
		1	13.74 -0-	0.73	0.730	released
	_	1	15.94 -0-	1.53	1.530	released
Total	Number:	3 1	Number/hr: 3.0	Wt: 2.79	Wt/hr: 2.	790
Cyprinus car	pio x Ca	rassi	us auratus		, .	
carp x goldf				Total	Mean	

7.76 -0-

0.26

0.260

released

Lengths in inches and weights in pounds			1	990 Electr	ofishir	g Sum	mary		Page A- 5
1		Lei	ngths	in inches	and we	ights	in p	ounds	
1				0 70	-0-		0 27	0.370	ralesced
1									
1 10.51 -0-									
1									
1 11.65 -0- 0.76 0.760 0.760 released 1 12.24 -0- 1.05 1.050 released 1 16.61 -0- 2.30 2.300 released 1 16.61 -0- 2.30 2.300 released									
Total Number: 9 Number/hr: 9.0 Wt: 7.06 Wt/hr: 7.060			1	11.65	-0-			0.760	released
Note Number 9 Number 1 Number 2 Number 3 Number				12.24	-0-		1.05	1.050	
Notropis atherinoides		_	1	16.61	-0-		2.30	2.300	released
Number Length Range	Total	Number	: 9	Number/hr	9.0	Wt:	7.06	Wt/hr: 7	.060
Number Length Range			es						
1	emerald shi				_				
Total Number: 8 Number/hr: 8.0 Wt: 0.05 Wt/hr: 0.050		1	Numbe:	r Length	Range	We	ight	Weight	Disposition
Total Number: 8 Number/hr: 8.0 Wt: 0.05 Wt/hr: 0.050									
Total Number: 8 Number/hr: 8.0 Wt: 0.05 Wt/hr: 0.050									
Number Length Range Total Mean Weight Disposition		_	2	3.11	3.23		0.02	0.010	preserved
Number Length Range	Total	Number:	8	Number/hr	: 8.0	Wt:	0.05	Wt/hr: 0	. 050
Number Length Range Weight Weight Disposition		uratus							
1 6.50 -0-	goldfish				_				
Total Number: 2 Number/hr: 2.0 Wt: 0.41 Wt/hr: 0.410		1	lumbe:	r Length	Range	We	ight	Weight	Disposition
Total Number: 2 Number/hr: 2.0 Wt: 0.41 Wt/hr: 0.410 Notemigonus crysoleucas golden shiner			1	6.50	-0-		0.20	0.200	released
Notemigonus crysoleucas Number Length Range Total Mean Weight Disposition					-0-				
Number Length Range Total Weight Weight Disposition	Total	Number	2	Number/hr	: 2.0	Wt:	0.41	Wt/hr: 0	.410
Number Length Range	Notemigonus	crysole	ıcas						
Total Number: 2 Number/hr: 2.0 Wt: 0.01 Wt/hr: 0.010	walden abin								
Total Number: 2 Number/hr: 2.0 Wt: 0.01 Wt/hr: 0.010 Lepomis cyan=llus green sunfish Number Length Range Total Mean Weight Disposition	dorgen surue					To	tal	Mean	
Total Number: 2 Number/hr: 2.0 Wt: 0.01 Wt/hr: 0.010 Lepomis cyan=lus green sunfish Number Length Range Total Mean Weight Disposition	gorden snin	er	lumbe:	r Length	Range				Disposition
Lepomis cyanellus green sunfish	gorden smin	er				We	ight	Weight	
Number Length Range Total Mean Weight Disposition		er <u>)</u> -	2	3.19	3.58	We	ight 0.01	Weight 0.005	preserved
Number Length Range Weight Weight Disposition		er <u>)</u> -	2	3.19	3.58	We	ight 0.01	Weight 0.005	preserved
1 -00- 0.02 0.020 released	Total	Number:	2	3.19	3.58	Wt:	0.01 0.01	Weight 0.005 Wt/hr: 0	preserved
Total Number: 1 Number/hr: 1.0 Wt: 0.02 Wt/hr: 0.020	Total	Number:	2 2	3.19 Number/hr	3.58	Wt:	0.01 0.01	Weight 0.005 Wt/hr: 0	preserved
Dorosoma cepedianum gizzard shad Number Length Range Total Weight Weight Disposition	Total	Number:	2 2	3.19 Number/hr	3.58	Wt:	0.01 0.01	Weight 0.005 Wt/hr: 0	preserved
Number Length Range Total Mean Weight Disposition	Total	Number:	2 2 Jumber	3.19 Number/hr	3.58 : 2.0 Range	Wt:	0.01 0.01 tal	Weight 0.005 Wt/hr: 0. Mean Weight	preserved .010 Disposition
Number Length Range Total Mean Weight Disposition	Total Lepomis cyan green sunfi	Number:	2 2 Yumber	3.19 Number/hr Length	3.58 : 2.0 Range	Wt:	0.01 0.01 tal	Weight 0.005 Wt/hr: 0. Mean Weight 0.020	preserved .010 Disposition released
1 2.95 -0- 0.01 0.010 released 27 3.19 5.35 0.79 0.029 released 10 5.35 8.35 1.10 0.110 released 8 5.39 6.93 0.66 0.083 released 1 7.17 -0- 0.14 0.140 released 1 7.20 -0- 0.12 0.120 released	Total Lepomis cyan green sunfin	Number:	2 2 Yumber	3.19 Number/hr Length	3.58 : 2.0 Range	Wt:	0.01 0.01 tal	Weight 0.005 Wt/hr: 0. Mean Weight 0.020	preserved .010 Disposition released
27 3.19 5.35 0.79 0.029 released 10 5.35 8.35 1.10 0.110 released 8 5.39 6.93 0.66 0.083 released 1 7.17 -0- 0.14 0.140 released 1 7.20 -0- 0.12 0.120 released	Total Lepomis cyangreen sunfin Total Dorosoma ce	Number: Number: Number:	2 2 Yumber	3.19 Number/hr Length	3.58 : 2.0 Range	Wt: To We Wt:	0.01 0.01 tal ight 0.02	Weight 0.005 Wt/hr: 0 Mean Weight 0.020 Wt/hr: 0	preserved .010 Disposition released
27 3.19 5.35 0.79 0.029 released 10 5.35 8.35 1.10 0.110 released 8 5.39 6.93 0.66 0.083 released 1 7.17 -0- 0.14 0.140 released 1 7.20 -0- 0.12 0.120 released	Total Lepomis cyangreen sunfin Total Dorosoma ce	Number: nellus sh Number:	2 : 2 : 3 : 1 : 1	3.19 Number/hr Length -0- Number/hr	3.58 : 2.0 Range -0- : 1.0	Wt: To We Wt:	0.01 0.01 tal ight 0.02 0.02	Weight 0.005 Wt/hr: 0. Mean Weight 0.020 Wt/hr: 0.	preserved .010 Disposition released
10 5.35 8.35 1.10 0.110 released 8 5.39 6.93 0.66 0.083 released 1 7.17 -0- 0.14 0.140 released 1 7.20 -0- 0.12 0.120 released	Total Lepomis cyangreen sunfin Total Dorosoma ce	Number: nellus sh Number:	2 Vumber	3.19 Number/hr r Length -0- Number/hr	3.58 : 2.0 Range -0- : 1.0	Wt: To We Wt:	o.01 0.01 tal ight 0.02 0.02	Weight 0.005 Wt/hr: 0. Mean Weight 0.020 Wt/hr: 0. Mean Weight	preserved .010 Disposition released .020 Disposition
8 5.39 6.93 0.66 0.083 released 1 7.17 -0- 0.14 0.140 released 1 7.20 -0- 0.12 0.120 released	Total Lepomis cyangreen sunfin Total Dorosoma ce	Number: nellus sh Number:	2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3.19 Number/hr Length -0- Number/hr Length 2.95	3.58 : 2.0 Range -0- : 1.0 Range	Wt: To We	0.01 0.01 tal ight 0.02 0.02 tal ight 0.01	Weight 0.005 Wt/hr: 0 Mean Weight 0.020 Wt/hr: 0 Mean Weight 0.010	preserved .010 Disposition released .020 Disposition released
1 7.17 -0- 0.14 0.140 released 1 7.20 -0- 0.12 0.120 released	Total Lepomis cyangreen sunfin Total Dorosoma ce	Number: nellus sh Number:	2 1 1 1 1 1 1 1 1 1 1	3.19 Number/hr Length -0- Number/hr Length 2.95 3.19	3.58 : 2.0 Range -0- : 1.0 Range -0- 5.35	Wt: To We Wt:	0.01 0.01 tal ight 0.02 0.02 tal ight 0.01 0.79	Weight 0.005 Wt/hr: 0. Mean Weight 0.020 Wt/hr: 0. Mean Weight 0.010 0.029	preserved .010 Disposition released .020 Disposition released released
	Total Lepomis cyangreen sunfin Total Dorosoma ce	Number: nellus sh Number:	2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3.19 Number/hr Length -0- Number/hr Length 2.95 3.19	3.58 : 2.0 Range -0- : 1.0 Range -0- 5.35 8.15	Wt: To We Wt:	0.01 0.01 tal ight 0.02 0.02 tal ight 0.01 0.79	Weight 0.005 Wt/hr: 0 Mean Weight 0.020 Wt/hr: 0 Mean Weight 0.010 0.029 0.110	preserved .010 Disposition released .020 Disposition released released released
1 7.68 -0- 0.17 0.170 released	Total Lepomis cyangreen sunfin Total Dorosoma ce	Number: nellus sh Number:	2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3.19 Number/hr r Length -0- Number/hr r Length 2.95 3.19 5.35 5.39	3.58 : 2.0 Range -0- : 1.0 Range -0- 5.35 8.35 6.93	Wt: To We To We	0.01 0.01 tal ight 0.02 0.02 tal ight 0.01 0.79 0.66	Weight 0.005 Wt/hr: 0. Mean Weight 0.020 Wt/hr: 0. Mean Weight 0.010 0.029 0.110 0.083	preserved .010 Disposition released .020 Disposition released released released released
	Total Lepomis cyangreen sunfin Total Dorosoma ce	Number: nellus sh Number:	2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3.19 Number/hr r Length -0- Number/hr r Length 2.95 3.19 5.35 5.39 7.17 7.20	3.58 : 2.0 Range -0- : 1.0 Range -0- 5.35 8.35 6.93 -00-	Wt: To We Wt:	0.01 0.01 tal ight 0.02 0.02 tal ight 0.79 1.10 0.66 0.14	Weight 0.005 Wt/hr: 0. Mean Weight 0.020 Wt/hr: 0. Mean Weight 0.010 0.029 0.110 0.083 0.140 0.120	Disposition released .020 Disposition released released released released released released released released

ay 1991					ng Summary		Page A- 6
	Le	engths	in inches	s and we	eights in p	ounds	
		1	7.68	-0-	0.16	0.160	released
		ī	7.72	-0-	0.10	0.220	released
		4	8.94	9.61	1.12	0.280	released
		5	8.94	10.16	1.61	0.322	released
		1	8.98	-0-	0.24	0.240	released
		ī	9.76	-0-	0.30	0.300	released
		ī	9.84	-0-	0.31	0.310	released
		ī	10.00	-0-	0.32	0.320	released
		ī	10.00	-0-	0.36	0.360	released
		ī	10.04	-0-	0.34	0.340	released
		ī	10.12	-0-	0.28	0.280	released
		ī	10.51	-0-	0.43	0.430	released
		ī	11.50	-0-	0.49	0.490	released
		î	11.50	-0-	0.44	0.440	released
		ī	12.44	-0-	0.56	0.560	released
			12.44				
Total	Number	: 71	Number/hi	r: 71.0	Wt:10.17	Wt/hr:10	.170
Micropterus	salmoid	les					
largemouth	bass				Total	Mean	
		Number	Length	Range	Weight	Weight	Dispositio
		1	6.65	-0-	0.14	0.140	released
		i	7.28	-0-	0.19	0.190	released
		1	10.91	-0-	0.19	0.190	released
		1	11.38	-0-	0.66	0.660	released
			11.36				
Total	Number	: 4	Number/h	r: 4.0	Wt: 1.66	Wt/hr: 1	.660
Lepomis gib	bosus						
pumpkinseed					Total	Mean	
		Number	Length	Range	Weight	Weight	Dispositio
		1	5.39	-0-	0.10	0.100	released
Total	Number	: 1	Number/hi	r: 1.0	Wt: 0.10	Wt/hr: 0	.100
Ambloplites	rupestr	is					
rock bass					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
				<u> </u>			
		1	5.47	-0-	0.12	0.120	released
		1	5.87	-0-	0.15	0.150	released
Total	Number	: 2	Number/hi	r: 2.0	Wt: 0.27	Wt/hr: 0	.270
Micropterus	dolowia	4					
smallmouth		-41			Total	Mean	
		Number	Length	Range	Weight	Weight	Dispositio
			Deligen	96			
		2	3.43	3.74	0.04	0.020	released
		î	6.81	-0-	0.11	0.110	released
		i	7.44	-0-	0.17	0.170	preserved
Total	Number	: 4	Number/hi	: 4.0	Wt: 0.32	Wt/hr: 0	.320

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 7

Notropis hud spotail shin		Number	Length Range	Total Weight	Mean Weight	Dispositio
		1	2.95 -0-	-0-	-0-	released
Total	Number	r: 1 N	Number/hr: 1.0	Wt: 0.00	Wt/hr: 0	.000
	prinus	Number	Length Range	Total Weight	Mean Weight	Dispositio
Carpiodes cy quillback	prinus	Number	Length Range			Dispositio released

Total for 1990- 2 Number:130 Number/hr:130.00 Wt:30.8 Wt/hr:30.81

Pomoxis nig		atus		Total	Mean	
araon orașe		Number	Length Range	Weight	Weight	Dispositio
		1	7.95 -0-	0.25	0.250	released
Total	Numbe	r: 1 h	Number/hr: 1.0	Wt: 0.25	Wt/hr: 0	.250
Lepomis mac	rochirus	S				
bluegill				Total	Mean	
		Number	Length Range	Weight	Weight	Disposition
		3	1.61 1.85	-0-	-0-	released
		1	2.76 -0-	0.01	0.010	released
		1	3.46 -0-	0.03	0.030	released
		1	4.02 -0-	0.05	0.050	released
		1	5.31 -0-	0.09	0.090	released
		1	5.39 -0-	0.11	0.110	released
		1	5.47 -0-	0.13	0.130	released
		1	5.91 -0-	0.16	0.160	released
		1	6.46 -0-	0.23	0.230	released
Total	Numbe	r: 11 }	Number/hr: 11.0		Wt/hr: 0	.810
Cyprinus ca		r: 11 }	Number/hr: 11.0	Wt: 0.81	Wt/hr: 0	.810
Cyprinus ca			· · · · · · · · · · · · · · · · · · ·	Wt: 0.81	Wt/hr: 0	
		r: 11 N	Number/hr: 11.0	Wt: 0.81	Wt/hr: 0	
Cyprinus ca			· · · · · · · · · · · · · · · · · · ·	Wt: 0.81	Wt/hr: 0	Disposition released
Cyprinus ca		Number	Length Range	Wt: 0.81 Total Weight	Wt/hr: 0 Mean Weight	Disposition
Cyprinus ca		Number 1 1 1	Length Range	Total Weight 1.49 1.46 1.45	Wt/hr: 0 Mean Weight 1.490	Disposition released released released
Cyprinus ca		Number	Length Range 14.17 -0- 14.25 -0-	Wt: 0.81 Total Weight 1.49 1.46	Wt/hr: 0 Mean Weight 1.490 1.460	Disposition released released
Cyprinus ca		Number 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0-	Total Weight 1.49 1.46 1.45	Wt/hr: 0 Mean Weight 1.490 1.460 1.450	Disposition released released released
Cyprinus ca		Number 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 14.72 -0-	Total Weight 1.49 1.46 1.45 1.54	Mean Weight 1.490 1.460 1.450 1.540	Disposition released released released released
Cyprinus ca		Number 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 14.72 -0- 15.71 -0-	Total Weight 1.49 1.46 1.45 1.54 1.78	Mean Weight 1.490 1.460 1.450 1.540 1.780	Disposition released released released released released released released released released
Cyprinus ca		Number 1 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 14.72 -0- 15.71 -0- 15.94 -0-	Total Weight 1.49 1.45 1.54 1.78 1.85	Mean Weight 1.490 1.460 1.450 1.780 1.850	Disposition released released released released released released released released released
Cyprinus ca		Number 1 1 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 14.72 -0- 15.71 -0- 15.94 -0- 16.57 -0-	Total Weight 1.49 1.46 1.45 1.78 1.85 2.04	Mt/hr: 0 Mean Weight 1.490 1.460 1.450 1.540 1.780 1.850 2.040	Disposition released
Cyprinus ca		Number 1 1 1 1 1 1 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 14.72 -0- 15.71 -0- 15.94 -0- 16.57 -0- 17.09 -0-	Total Weight 1.49 1.46 1.45 1.54 1.78 1.85 2.04	Wt/hr: 0 Mean Weight 1.490 1.460 1.450 1.780 1.850 2.040 2.440	Disposition released
Cyprinus ca		Number 1 1 1 1 1 1 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 14.72 -0- 15.71 -0- 15.94 -0- 16.57 -0- 17.09 -0- 17.52 -0-	Total Weight 1.49 1.46 1.54 1.78 2.04 2.44	Mt/hr: 0 Mean Weight 1.490 1.450 1.540 1.780 1.850 2.040 2.440 2.441	Disposition released
Cyprinus ca		Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 15.71 -0- 15.71 -0- 17.09 -0- 17.52 -0- 18.98 -0-	Total Weight 1.49 1.46 1.54 1.78 1.85 2.04 2.41 3.22	Mean Weight 1.490 1.460 1.540 1.780 1.850 2.040 2.440 2.410 3.220	Disposition released
Cyprinus ca		Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 14.72 -0- 15.71 -0- 15.94 -0- 16.57 -0- 17.09 -0- 17.52 -0- 18.98 -0- 21.30 -0-	Total Weight 1.49 1.46 1.54 1.78 2.04 2.44 2.41 3.22 4.27	Wt/hr: 0 Mean Weight 1.490 1.450 1.540 1.780 2.040 2.440 2.410 3.220 4.270	released released released released released released released released released released released
Cyprinus ca		Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 15.71 -0- 15.71 -0- 15.94 -0- 16.57 -0- 17.09 -0- 17.52 -0- 18.98 -0- 21.30 -0- 22.01 -0-	Total Weight 1.49 1.46 1.45 1.54 2.04 2.44 2.41 3.22 4.27 5.40	Wt/hr: 0 Mean Weight 1.490 1.450 1.540 1.780 1.850 2.040 2.440 2.410 3.220 4.270 5.400	Disposition released
Cyprinus ca	rpio Numbe	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 14.72 -0- 15.71 -0- 15.94 -0- 17.52 -0- 18.98 -0- 21.30 -0- 22.01 -00-	Total Weight 1.49 1.46 1.45 1.54 1.78 1.85 2.04 2.41 3.22 4.27 5.40 3.04	Wt/hr: 0 Mean Weight 1.490 1.460 1.780 1.780 1.850 2.040 2.440 2.440 3.220 4.270 4.270 3.040	Disposition released
Cyprinus ca carp	Number	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 14.17 -0- 14.25 -0- 14.69 -0- 14.72 -0- 15.71 -0- 15.94 -0- 17.52 -0- 18.98 -0- 21.30 -0- 22.01 -00-	Total Weight 1.49 1.46 1.45 1.54 1.78 1.85 2.04 2.41 3.22 4.27 5.40 3.04	Wt/hr: 0 Mean Weight 1.490 1.460 1.780 1.780 1.850 2.040 2.440 2.440 3.220 4.270 4.270 3.040	Disposition released

1 15.75 -0-

1.57

1.570

released

Total	Number	r: 1	Number/hr:	1.0	Wt: 1.57	Wt/hr: 1	.570
Aplodinotus		ens					
freshwater d	lrum	Numbe	r Length Ra	naá	Total Weight	Mean Weight	Disposition
		Mambe	- Deligeli Re		Margine	Welgite	Disposition
		1	-00)-	0.09	0.090	dead
Total	Number	r: 1	Number/hr:	1.0	Wt: 0.09	Wt/hr: 0	.090
Lepomis cyan	ellus						
green sunfis	h				Total	Mean	D11-1
		Numbe	r Length Ra	ange	Weight	Weight	Disposition
		1	1.97 -0) -	-0-	-0-	released
		1	5.35 -0)-	0.11	0.110	released
		1)-	0.12	0.120	released
		1	5.63 -0)-	0.13	0.130	released
Total	Number	r: 4	Number/hr:	4.0	Wt: 0.36	Wt/hr: 0	.360
Dorosoma cep	edianu						
gizzard shad					Total	Mean	
,		Numbe	r Length Ra	ange	Weight	Weight	Disposition
		2	5.59	5.87	0.14	0.070	dead
		ī)-	0.27	0.270	dead
Total	Number	r: 3	Number/hr:	3.0	Wt: 0.41	Wt/hr: 0	.410
Micropterus	salmoi	des					
largemouth h					Total	Mean	
		Numbe	r Length Ra	inge	Weight	Weight	Disposition
		1	7.95 -0	-	0.22	0.220	released
Total	Number	r: 1	Number/hr:	1.0	Wt: 0.22	Wt/hr: 0	.220
Lepomis micr	ol onhus						
redear sunfi					Total	Mean	
		Numbe	r Length Ra	inge	Weight	Weight	Disposition
) <u>-</u>			
		1	3.70 -0) -	0.04	0.040	released
Total	Number	r: 1	Number/hr:	1.0	Wt: 0.04	Wt/hr: 0	. 040
Carpiodes ca	rpio						
river carpsu	icker				Total	Mean	
-		Numbe	r Length Ra	ange	Weight	Weight	Disposition
		1	13.62 -0)-	1.08	1.080	released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 10

Notropis blennius river shiner	Number	Length Range	Total Weight	Mean Weight	Disposition
	1	2.40 -0-	-0-	-0-	preserved
Total Numbe	r: 1 N	umber/hr: 1.0	Wt: 0.00	Wt/hr: 0	.000
Carpiodes cyprinus quillback	Number	Length Range	Total Weight	Mean Weight	Disposition
	1	12.32 -0-	0.77	0.770	released

Total Number: 1 Number/hr: 1.0 Wt: 0.77 Wt/hr: 0.770

Total for 1990- 3 Number: 39 Number/hr: 39.00 Wt:38.0 Wt/hr:37.99

Collection 1990- 4

River mile 249.6 to 249.8

Notropis atherinoides emerald shiner

Number

Collection date: 09/08/90

Johnson Island

Run = 0.47 hrs

Pomoxis nigromaculatus black crappie Total Mean Number Length Range Weight Weight Disposition 1 7.05 -0-0.16 0.160 released Total Number: 1 Number/hr: 2.1 Wt: 0.16 Wt/hr: 0.340 Lepomis macrochirus bluegill Total Mean Number Length Range Weight Weight Disposition 5.39 -0-0.13 0.130 released 1 5.63 -0-0.16 0.160 released Total Number: Number/hr: 2 4.3 Wt: 0.29 Wt/hr: 0.617 Cyprinus carpio carp Total Mean Number Length Range Weight Weight Disposition 1 14.25 -0-1.21 1.210 released 1 14.37 -0-1.54 1.540 released 17.95 -0-1 2.82 2.820 released Total Number: 3 Number/hr: 6.4 Wt: 5.57 Wt/hr:11.851 Ictalurus punctatus channel catfish Total Mean Number Length Range Weight Weight Disposition 1 10.51 -0-0.34 0.340 released Total Number: Number/hr: 2.1 Wt: 0.34 Wt/hr: 0.723

		35	1.85	3.70	0.18	0.005	released
Total	Number	: 35	Number/hr: 74.5		Wt: 0.18	Wt/hr: 0	. 383
Lepomis cyar green sunfis	sh	Number	Length	Range	Total Weight	Mean Weight	Disposition

Length Range

Total

Weight

Mean

Weight

Disposition

Total

Number:

Wt/hr: 2.426

Total Number: 2 Number/hr: 4.3 Wt: 0.04 Wt/hr: 0.085 Dorosoma cepedianum gizzard shad Total Mean Number Length Range Weight Weight Disposition released 1 5.00 -0-0.04 0.040 1 8.15 -0-0.21 0.210 released Total Number: 2 Number/hr: 4.3 Wt: 0.25 Wt/hr: 0.532 Micropterus salmoides largemouth bass Total Mean Number Length Range Weight Weight Disposition 0.14 0.140 1 6.89 -0released 0.300 1 8.43 -0-0.30 released 1 9.25 -0-0.42 0.420 released Total Number: 3 Number/hr: 6.4 Wt: 0.86 Wt/hr: 1.830 Carpiodes carpio river carpsucker Total Mean Number Length Range Weight Weight Disposition 13.35 -0-1.04 1.040 released 1.070 released 1 13.66 -0-1.07 Total Number/hr: Wt: 2.11 Wt/hr: 4.489 Number: 2 4.3 Ictiobus bubalus smallmouth buffalo Total Mean Number Length Range Weight Weight Disposition 1 14.69 -0-1.53 1.530 released Total Number: 1 Number/hr: 2.1 Wt: 1.53 Wt/hr: 3.255 Morone chrysops white bass Total Mean Number Length Range Weight Weight Disposition 1 9.88 -0-0.43 0.430 released 1 11.42 -0-0.71 0.710 released

Total for 1990- 4 Number: 54 Number/hr:114.89 Wt:12.5 Wt/hr:26.53

Number/hr:

4.3

Wt: 1.14

1990 Electrofishing Summary Lengths in inches and weights in pounds

Pomoxis nig	romacula	tus					
black crapp	ie	Numbe	r Length	Range	Total Weight	Mean Weight	Disposi
		1	5.83 6.26	-0-	0.09	0.090 0.110	release
Total	Number	: 2	Number/h	r: 3.6	Wt: 0.20	Wt/hr: 0	.364
Lepomis mac	rochirus	1					
bluegill		Numbe	r Length	Range	Total Weight	Mean Weight	Disposi
		1	1.34	-0-	-0-	-0-	release
		3	1.65	2.01	0.01	0.003	release
		2 3	2.83 3.82	2.99 3.82	0.04 0.12	0.020 0.040	release release
Total	Number	: 9	Number/h	r: 16.4	Wt: 0.17	Wt/hr: 0	.309
Pimephales							-
	notatus						
bluntnose m		Mumbo	w Longth	Dange	Total	Mean	Diameni
		Numbe			Weight	Weight	
		7	1.38	1.89	Weight 0.01	Weight 0.001	preserv
					Weight	Weight	preserv
		7 1 1	1.38	1.89 -0- -0-	0.01	0.001	preserv release preserv
Total Cyprinus car	innow Number	7 1 1	1.38 1.54 2.32	1.89 -0- -0-	0.01 -0- -0- Wt: 0.01	0.001 -0- -0- Wt/hr: 0	preserv release preserv
bluntnose m	innow Number	7 1 1 2 : 9	1.38 1.54 2.32 Number/h	1.89 -0- -0- r: 16.4	Weight 0.01 -00- Wt: 0.01 Total	0.001 -0- -0- Wt/hr: 0	preserv release preserv
Total Cyprinus car	innow Number	7 1 1	1.38 1.54 2.32 Number/h	1.89 -0- -0- r: 16.4	0.01 -0- -0- Wt: 0.01	0.001 -0- -0- Wt/hr: 0	preserv release preserv
Total Cyprinus car	innow Number	7 1 1 : 9	1.38 1.54 2.32 Number/h:	1.89 -0- -0- r: 16.4 Range	Weight 0.01 -00- Wt: 0.01 Total Weight 0.80	weight 0.001 -00- Wt/hr: 0 Mean Weight 0.800	preserv release preserv .018 Disposi release
Total Cyprinus car	innow Number	7 1 1 : 9	1.38 1.54 2.32 Number/h: r Length 11.89 15.47	1.89 -0- -0- r: 16.4 Range	Weight 0.01 -00- Wt: 0.01 Total Weight 0.80 1.42	Weight 0.001 -00- Wt/hr: 0 Mean Weight 0.800 1.420	preserv release preserv .018 Disposi release
Total Cyprinus car	innow Number	7 1 1 : 9 Numbe	1.38 1.54 2.32 Number/h r Length 11.89 15.47 18.23	1.89 -0- -0- r: 16.4 Range	Weight 0.01 -00- Wt: 0.01 Total Weight 0.80 1.42 2.67	Weight 0.001 -00- Wt/hr: 0 Mean Weight 0.800 1.420 2.670	preserv release preserv .018 Disposi release release
Total Cyprinus car	innow Number	7 1 1 : 9	1.38 1.54 2.32 Number/h: r Length 11.89 15.47	1.89 -0- -0- r: 16.4 Range	Weight 0.01 -00- Wt: 0.01 Total Weight 0.80 1.42	Weight 0.001 -00- Wt/hr: 0 Mean Weight 0.800 0.400 2.670 2.940	preserv release preserv .018 Disposi release release
Total Cyprinus car	innow Number	7 1 1 : 9	1.38 1.54 2.32 Number/h r Length 11.89 15.47 18.23	1.89 -0- -0- r: 16.4 Range -0- -0- -0-	Weight 0.01 -00- Wt: 0.01 Total Weight 0.80 1.42 2.67	Weight 0.001 -00- Wt/hr: 0 Mean Weight 0.800 1.420 2.670	preserv release preserv .018 Disposi release release
Total Cyprinus car carp Total Ictalurus pi	Number rpio Number	7 1 1 2: 9 Numbe	1.38 1.54 2.32 Number/h: r Length 11.89 15.47 18.23 18.43	1.89 -0- -0- r: 16.4 Range -0- -0- -0-	Weight 0.01 -00- Wt: 0.01 Total Weight 0.80 1.42 2.67 2.94 Wt: 7.83	Weight 0.001 -00- Wt/hr: 0 Mean Weight 0.800 1.420 2.670 2.940 Wt/hr:14	preserv release preserv .018 Disposi release release
Total Cyprinus car carp Total	Number rpio Number	7 1 1 2: 9 Numbe	1.38 1.54 2.32 Number/h: r Length 11.89 15.47 18.23 18.43	1.89 -0- -0- -0- r: 16.4 Range -0- -0- -0- -0- -0-	Weight 0.01 -00- Wt: 0.01 Total Weight 0.80 1.42 2.67 2.94	Weight 0.001 -00- Wt/hr: 0 Mean Weight 0.800 0.400 2.670 2.940	preserv release preserv .018 Disposi release release release
Total Cyprinus car carp Total Ictalurus pi	Number rpio Number	7 1 1 : 9 Numbe	1.38 1.54 2.32 Number/h: r Length 11.89 15.47 18.23 18.43	1.89 -0- -0- -0- r: 16.4 Range -0- -0- -0- -0- -0-	Weight 0.01 -0- 0- Wt: 0.01 Total Weight 0.80 1.42 2.67 2.94 Wt: 7.83	Weight 0.001 -00- Wt/hr: 0 Mean Weight 0.800 0.420 2.670 2.940 Wt/hr:14	Disposi release release release

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 14

Notropis athe		des			Total	Mean	
emerara surne	•	Number	Length	Range	Weight	Weight	Disposition
		8 3	1.54 2.83	2.17	0.01 0.03	0.001 0.010	preserved preserved
Total	Numbe	r: 11 1	Number/h	r: 20.0	Wt: 0.04	Wt/hr: 0	.073
Lepomis cyane					Total	Mean	
green sunfish		Number	Length	Range	Weight	Weight	Disposition
		1	1.57	-0-	-0-	-0-	released
		1	2.32	-0-	-0-	-0-	released
		2	2.32	2.60	0.02	0.010	released
		1	3.62	-0-	0.04	0.040	released
Total	Numbe	r: 5 1	Number/h	r: 9.1	Wt: 0.06	Wt/hr: 0	.109
Dorosoma cepe	dianu	m					
gizzard shad					Total	Mean	
,		Number	Length	Range	Weight	Weight	Disposition
		10	3.43	5.00	0.37	0.037	dead
		5	7.09	7.68	0.79	0.158	dead
		4	9.25	10.16	1.27	0.317	dead
		3	10.39	11.73	1.02	0.340	released
Total	Numbe:	r: 22	Number/h	r: 40.0	Wt: 3.45	Wt/hr: 6	.273

Micropterus s		aes			mana 1	Mann	
largemouth ba	SS			n	Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	3.31	-0-	0.02	0.020	released
		ī	3.70	-0-	0.02	0.020	released
		ī	8.11	-0-	0.29	0.290	released
		ī	12.83	-0-	1.21	1.210	released
Total	Numbe	r: 4 1	Number/h	r: 7.3	Wt: 1.54	Wt/hr: 2	.800
Ictiobus buba	lus						
smallmouth bu					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	8.46	-0-	0.25	0.250	released
Total	Numbe	r: 1 1	Number/h	r: 1.8	Wt: 0.25	Wt/hr: 0	. 455
Micropterus d	olomi	eui					
smallmouth ba		-			Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	9.37	-0-	0.31	0.310	released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 15

Total	Number	: 1 N	lumber/hi	1.8	Wt: 0.31	Wt/hr: 0	. 564
Carpiodes cy quillback	•	Number	Length	Range	Total Weight	Mean Weight	Disposition
		1	11.50	-0-	0.52	0.520	released
Total	Number	: 1 N	umber/hi	: 1.8	Wt: 0.52	Wt/hr: 0	.945
Perca flaves yellow perch	1	Number	Length	Range	Total Weight	Mean Weight	Disposition
		1	4.88 5.12	-0- -0-	0.06	0.060	released released
		: 2 N	umber/hr		Wt: 0.10		

Total for 1990- 5 Number: 73 Number/hr:132.73 Wt:18.0 Wt/hr:32.80

Cyprinus carpio carp	Number	Length Range	Total Weight	Mean Weight	Disposition
	1	11.81 -0-	0.80	0.800	released
Total Numbe	er: 1 N	Number/hr: 3.1	Wt: 0.80	Wt/hr: 2	.500
Ictalurus punctati	us				
channel catfish			Total	Mean	
	Number	Length Range	Weight	Weight	Disposition
	1	8.86 -0-	0.20	0.200	released
	1	13.58 -0-	0.85	0.850	released
	1	16.73 -0-	1.35	1.350	released
	1	21.65 -0-	2.85	2.850	released
Total Number	er: 4 N	dumber/hr: 12.5	Wt: 5.25	Wt/hr:16	.406
Notropis atherino	ides				
emerald shiner			Total	Mean	
	Number	Length Range	Weight	Weight	Dispositio
	1	2.76 -0-	-0-	-o -	preserved
Total Number		2.76 -0- Number/hr: 3.1	-0- Wt: 0.00	-0- Wt/hr: 0	
Dorosoma cepedian	er: 1 N		Wt: 0.00	Wt/hr: 0	
Dorosoma cepedian	er: 1 N	Number/hr: 3.1	Wt: 0.00	Wt/hr: 0	.000
Dorosoma cepedian	er: 1 N		Wt: 0.00	Wt/hr: 0	.000
Dorosoma cepedian	er: 1 Number	Length Range 4.13 -0-	Wt: 0.00 Total Weight 0.02	Wt/hr: 0 Mean Weight 0.020	Disposition released
Dorosoma cepedian	er: 1 Number	Length Range 4.13 -0- 4.72 -0-	Wt: 0.00 Total Weight 0.02 0.05	Wt/hr: 0 Mean Weight 0.020 0.050	Disposition released released
Dorosoma cepedian	er: 1 Number	Length Range 4.13 -0- 4.72 -0- 4.72 -0-	Total Weight 0.02 0.05 0.04	Wt/hr: 0 Mean Weight 0.020 0.050 0.040	Disposition released released released
Dorosoma cepedian	Number	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05	Mean Weight 0.020 0.050 0.040 0.050	Disposition released released released released released
Dorosoma cepedian	er: 1 Number Number 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.10 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08	Mean Weight 0.020 0.050 0.040 0.050 0.080	Disposition released released released released released
Dorosoma cepedian	Number Number 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 5.12 -0- 6.81 -0- 6.81 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08 0.12	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.080 0.120	Disposition released
	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.10 -0- 6.81 -0- 6.93 -0-	Total Weight 0.02 0.05 0.04 0.05 0.08 0.12	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.080 0.120 0.120	Disposition released released released released released released released
Dorosoma cepedian	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 5.12 -0- 6.10 -0- 6.81 -0- 6.93 -0- 7.09 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.12 0.12	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.080 0.120 0.120 0.130	Disposition released
Dorosoma cepedian	Par: 1 Number Number 1	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.81 -0- 6.81 -0- 7.09 -0- 7.09 -0-	Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.13 0.13	Mt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.080 0.120 0.120 0.130 0.130	Disposition released
Dorosoma cepedian	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.10 -0- 6.81 -0- 6.93 -0- 7.09 -0- 7.09 -0- 7.48 -0-	Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.12 0.13 0.13	Mean Weight 0.020 0.050 0.040 0.050 0.120 0.120 0.130 0.130	Disposition released released released released released released released released released released released
Dorosoma cepedian	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.81 -0- 6.81 -0- 6.93 -0- 7.09 -0- 7.48 -0- 7.52 -0-	Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.12 0.13 0.14 0.15	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.120 0.120 0.130 0.130 0.140 0.150	Disposition released
Dorosoma cepedian	Pum Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.10 -0- 6.81 -0- 6.93 -0- 7.09 -0- 7.09 -0- 7.52 -0- 7.52 -0- 7.52 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.12 0.13 0.13 0.14 0.15 0.16	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.120 0.120 0.130 0.130 0.140 0.150	Disposition released
Dorosoma cepedian	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 5.12 -0- 6.10 -0- 6.81 -0- 6.93 -0- 7.09 -0- 7.52 -0- 7.52 -0- 7.52 -0- 7.52 -0- 7.52 -0- 7.58 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.13 0.13 0.13 0.15 0.16 0.16	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.120 0.120 0.130 0.130 0.140 0.150 0.160	Disposition released
Dorosoma cepedian	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.81 -0- 6.83 -0- 7.09 -0- 7.09 -0- 7.52 -0- 7.52 -0- 7.68 -0- 7.68 -0- 7.68 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.13 0.13 0.14 0.15 0.16 0.16	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.120 0.120 0.130 0.130 0.140 0.150 0.160 0.160 0.180	Dispositio released
Dorosoma cepedian	Number	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.10 -0- 6.81 -0- 7.09 -0- 7.09 -0- 7.48 -0- 7.52 -0- 7.68 -0- 7.68 -0- 7.87 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.12 0.13 0.13 0.14 0.15 0.16 0.16 0.18	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.120 0.120 0.130 0.130 0.140 0.150 0.160 0.180 0.180	Dispositio released
Dorosoma cepedian	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.81 -0- 6.93 -0- 7.09 -0- 7.09 -0- 7.52 -0- 7.52 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.13 0.14 0.15 0.16 0.16 0.18 0.18 0.20	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.120 0.120 0.130 0.130 0.150 0.160 0.160 0.180 0.200	Disposition released
Dorosoma cepedian	Number	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.10 -0- 6.81 -0- 6.93 -0- 7.09 -0- 7.52 -0- 7.52 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 8.07 -0- 8.07 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.12 0.13 0.13 0.14 0.15 0.16 0.16 0.18 0.20 0.18	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.120 0.120 0.130 0.140 0.150 0.160 0.160 0.180 0.200 0.180	Disposition released
Dorosoma cepedian	Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 4.13 -0- 4.72 -0- 4.72 -0- 5.12 -0- 6.81 -0- 6.93 -0- 7.09 -0- 7.09 -0- 7.52 -0- 7.52 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0- 7.68 -0-	Wt: 0.00 Total Weight 0.02 0.05 0.04 0.05 0.08 0.12 0.13 0.14 0.15 0.16 0.16 0.18 0.18 0.20	Wt/hr: 0 Mean Weight 0.020 0.050 0.040 0.050 0.120 0.120 0.130 0.130 0.150 0.160 0.160 0.180 0.200	Disposition released

7.0		990 Electro			nounda	Page A- 17
Le	ing cins	In Inches	and we	ignes in	Journas	
	1	9.06 -	-0-	0.28	0.280	released
	1	9.13 -	·o-	0.25	0.250	released
	1	9.25 -	-0-	0.30	0.300	released
	1			0.30	0.300	released
						released
	1	9.88 -	-0-	0.30	0.300	released
Number	: 25	Number/hr:	78.1	Wt: 4.37	Wt/hr:13	. 656
	Numbe	r Length F	Range	Weight	Weight	Dispositio
	1	12.80 -	-0-	0.90	0.900	released
Number	: 1	Number/hr:	3.1	Wt: 0.90	Wt/hr: 2	.813
ochlorie						
				Total	Mean	
	Numbe	r Length F	Range	Weight	Weight	Dispositio
	1	3.78 -	-0-	0.01	0.010	preserved
Number	: 1	Number/hr:	3.1	Wt: 0.01	Wt/hr: 0	.031
Number		Number/hr:	3.1	Wt: 0.01	Wt/hr: 0	.031
		Number/hr:	3.1	Wt: 0.01	Wt/hr: 0	.031
dolomie					<u> </u>	
dolomie	ui	r Length F		Total	Mean	Dispositio
dolomie	Numbe	r Length F	Range	Total Weight	Mean Weight	Disposition released
dolomie bass Number	Numbe	r Length F	Range	Total Weight	Mean Weight 0.350	Disposition released
dolomie bass	Numbe	r Length F	Range	Total Weight	Mean Weight 0.350	Disposition released
dolomie bass Number tenense	Numbe	r Length F 9.65 - Number/hr:	Range -0-	Total Weight 0.35 Wt: 0.35	Mean Weight 0.350 Wt/hr: 1	Disposition released
dolomie bass Number tenense	Numbe	r Length F	Range -0- 3.1	Total Weight 0.35 Wt: 0.35 Total Weight	Mean Weight 0.350 Wt/hr: 1 Mean Weight	Disposition released .094
dolomie bass Number tenense	Number 1	r Length F 9.65 - Number/hr: r Length F	Range -0- 3.1 Range	Total Weight 0.35 Wt: 0.35 Total Weight 0.02	Mean Weight 0.350 Wt/hr: 1 Mean Weight 0.020	Disposition released .094 Disposition preserved
dolomie bass Number tenense	Numbe	r Length F 9.65 - Number/hr: r Length F	Range -0- 3.1	Total Weight 0.35 Wt: 0.35 Total Weight	Mean Weight 0.350 Wt/hr: 1 Mean Weight	Disposition released
	Number arpio ucker Number	Number: 25 arpio ucker Number: 1 Number: 1 ochloris rring Numbe	1 9.06 1 9.13 1 9.25 1 9.45 1 9.65 1 9.88 Number: 25 Number/hr: arpic cucker	1 9.06 -0- 1 9.13 -0- 1 9.25 -0- 1 9.45 -0- 1 9.65 -0- 1 9.88 -0- Number: 25 Number/hr: 78.1 arpio ucker	1 9.06 -0- 0.28 1 9.13 -0- 0.25 1 9.25 -0- 0.30 1 9.45 -0- 0.30 1 9.65 -0- 0.30 1 9.65 -0- 0.30 1 9.88 -0- 0.30 Number: 25 Number/hr: 78.1 Wt: 4.37 Wticker	1 9.13 -0- 0.25 0.250 1 9.25 -0- 0.30 0.300 1 9.45 -0- 0.30 0.300 1 9.45 -0- 0.32 0.320 1 9.65 -0- 0.32 0.320 1 9.88 -0- 0.30 0.300 Number: 25 Number/hr: 78.1 Wt: 4.37 Wt/hr:13 arpic cucker

Total for 1990- 6 Number: 36 Number/hr:112.50 Wt:11.7 Wt/hr:36.66

1990 Electrofishing Summary Lengths in inches and weights in pounds

Lepomis macı bluegill		Numbe:	r Length R	Range	Total Weigh		t Dispositio
		1	5.51 -	-0-	0.1	3 0.13	released
Total	Number	: 1	Number/hr:	1.5	Wt: 0.1	3 Wt/hr:	0.194
Notropis atl		les					
emerald shir		Number	r Length R	ange	Total Weigh		t Disposition
			- Deligen A	ange	- Heigh		- Dispositi
		3	2.05	3.07	0.0	3 0.01	o preserved
		1		-0-	-0-	-0-	preserved
		1	3.23 -	-0-	-0-	-0-	preserved
Total	Number	: 5	Number/hr:	7.5	Wt: 0.0	3 Wt/hr:	0.045
Lepomis cyan	nellus						
green sunfis					Total		
•		Number	r Length R	Range	Weigh	t Weigh	t Dispositi
		1	2.80 -	-0-	0.0	1 0.01	released
Total	Number	: 1	Number/hr:	1.5	Wt: 0.0	1 Wt/hr:	0.015
Dorosoma cer	nedianum	1					
gizzard shad					Total	Mean	
		Number	r Length R	lange	Weigh	t Weight	t Dispositi
		1	4.65 -	-0-	0.0	5 0.05	released
		1	6.69 -	-0-	0.0		
		1		-0-	0.1		
		1		-0-	0.1		
		1		-0-	0.1		
		1		-0-	0.1		
		1		-0-	0.1		
		1		-0-	0.2		
		1		-0 -	0.2		
		1		-0-	0.1 0.1		
		1		-0-	0.1		
		•		-0-	0.5		
		1		-0-	0.5	J 0.JJ	
Total	Number	1			Wt: 2.6		3.910
Total Carpiodes ve		1	12.83 -		Wt: 2.6	2 Wt/hr:	3.910
	elifer	1	12.83 -			2 Wt/hr: Mean	

-	Le	engths i	n inches	s and we	ights in p	ounds	
		1	12.20	-0-	0.80	0.800	dead
Total	Number	: 1 N	lumber/h	r: 1.5	Wt: 0.80	Wt/hr: 1	.194
Carpiodes ca							
river carps	ıcker	Number	Length	Range	Total Weight	Mean Weight	Dispositio
		1	10.35	-0-	0.44	0.440	dead
		1	13.31	-0-	1.05	1.050	dead
		1	13.58	-0-	1.05	1.050	released
Total	Number	: 3 N	lumber/h	r: 4.5	Wt: 2.54	Wt/hr: 3	.791
Ictiobus bul	alus						
smallmouth h	ouffalo				Total	Mean	
		Number	Length	Range	Weight	Weight	Dispositio
		1	13.07	-0-	1.15	1.150	released
		1	14.06	-0-	1.28	1.280	released
		1	14.17	-0-	1.40	1.400	released
		1	14.88	-0-	1.62	1.620	released
		1	15.12	-0-	1.55	1.550	released
		1	15.16	-0-	1.73	1.730	released
		1	16.73	-0-	2.28	2.280	released
Total	Number	: 7 N	lumber/h	r: 10.4	Wt:11.01	Wt/hr:16	.433
Alosa chryso		3					
skipjack her	rring	Number	Length	Range	Total Weight	Mean Weight	Dispositio
		$\overline{}$					

Total for 1990- 7 Number: 32 Number/hr: 47.76 Wt:17.2 Wt/hr:25.61

Total Number: 1 Number/hr: 1.5 Wt: 0.02 Wt/hr: 0.030

Ictiobus cy		ıs						
bigmouth bu		Number	Length	Range	Tot Wei		Mean Weight	Disposit
			15.75	-0-		.33	2.330	released
		î	15.75	-0-		.50	2.500	released
		ī	16.10	-0-		.75	2.750	released
		ī	16.18	-0-	2	. 52	2.520	released
		ĩ	16.85	-0-		.70	2.700	released
		1	17.32	-0-	2	.80	2.800	released
		1	20.87	-0-	5	.00	5.000	released
Total	Number	: 7 1	Number/hr	: 10.4	Wt:20	.60	Wt/hr:30.	746
Lepomis mac	rochirus	,						
bluegill					Tot		Mean	
		Number	Length	Range	Wei	ght	Weight	Disposit
		1	3.54	-0-	0	.01	0.010	released
		2	4.25	4.53		.13	0.065	released
		1	6.26	-0-	0	.20	0.200	released
Total	Number	: 4 1	Number/hr	: 6.0	Wt: 0	.34	Wt/hr: 0.	507
Cyprinus ca	rpio							
carp				_	Tot		Mean	
		Number	Length	Range	Wei	gnt	Weight	Disposit:
		1	23.35	-0-	5	.20	5.200	released
Total	Number	: 1 1	Number/hr	: 1.5	Wt: 5	.20	Wt/hr: 7.	761
Ictalurus p		1						
channel cat	fish				Tot		Mean	
		Number	Length	Range	Wei	ght	Weight	Disposit:
		1	12.99	-0-	0	.62	0.620	released
Total	Number	: 1 1	Number/hr	: 1.5	Wt: 0	.62	Wt/hr: 0.	925
Aplodinotus	grunnie	ns						
freshwater	drum				Tot		Mean	
		Number	Length	Range	Wei	ght	Weight	Disposit
		1	7.24	-0-	0	.17	0.170	released
		ī		-0-		.35	0.350	released
		1		-0-	2	.20	2.200	released
Total	Number	: 3 1	Number/hr	: 4.5	Wt: 2		Wt/hr: 4.	

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 21

		•				-	
Dorosoma cer	edianu	m					
gizzard shad	1	Number	Length	Range	Total Weight	Mean Weight	Disposition
		4	2.80	2.99	0.03	0.007	released
		107	3.15	3.98	1.95	0.007	released
						0.018	released
		11	3.66	4.33	0.24	0.022	released
Total	Numbe	r:122 N	lumber/h	r:182.1	Wt: 2.22	Wt/hr: 3	.313
Micropterus	calmoi	dee					
largemouth k		ues			Total	Mean	
Targemouth 1	7455	Number	T + -	Dance	Weight		Disposition
		Number	Length	Range	Melduc	weight	Disposicion
		1	12.20	-0-	1.16	1.160	released
Total	Numbe	r: 1 h	lumber/h	r: 1.5	Wt: 1.16	Wt/hr: 1	.731
Ictiobus bub	alua.						
smallmouth h					Total	Mean	
SMGIIMOGCH L	Julialo	Number	Length	Pange	Weight		Disposition
		Mamper	Deng Cir	Kange	weight	weight	Disposition
		1	12.56	-0-	1.06	1.060	released
				-0-	1.10		released
		1	13.39				
		1	13.82	-0-	1.32	1.320	released
		1	13.82	-0-	1.30	1.300	released
		1	14.65	-0-	1.45	1.450	released
		1	16.38	-0-	2.60	2.600	released
		1	16.69	-0-	2.50	2.500	released
Total	Numbe	r: 7 h	lumber/h	r: 10.4	Wt:11.33	Wt/hr:16	.910
11		_					
Alosa chryso		8			Total	Mean	
skipjack her	ring	Number	7 annah	Dames			Dimeniale
		Number	Length	kange	Weight	Weight	Disposition
		2	3.23	4.17	0.03	0.015	released
Total	Numbe	r: 2 h	umber/h	r: 3.0	Wt: 0.03	Wt/hr: 0.	.045
						· · · · · · · · · · · · · · · · · · ·	
Dorosoma pet							
threadfin sh	ad				Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		4	3.31	3.74	0.08	0.020	released
Total	Numbe	r: 4 h	lumber/h	r: 6.0	Wt: 0.08	Wt/hr: 0	. 119
Mayone at-	ana						
Morone chrys white bass	Pados				Total	Mean	
white bass		Marsh	7	D			21
		Number	Length	kange	Weight	Weight	Disposition
			4 4*			0.000	
		1	4.41	-0-	0.02	0.020	released
		1	10.83	-0-	0.65	0.650	released
		1	10.87	-0-	0.68	0.680	released
		1	11.93	-0-	0.87	0.870	released
		1	12.32	-0-	1.00	1.000	released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 22

13.50 -0-

1.30

1.300 released

Total

Number: 6 Number/hr: 9.0 Wt: 4.52 Wt/hr: 6.746

Total for 1990- 8 Number:158 Number/hr:235.82 Wt:48.8 Wt/hr:72.87

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 23

Collection 1990- 9 Hennepin Island River mile 207.5 to 208.1 Collection date: 09/11/90 Run = 0.30 hrs

gizzard shad		Number	Length Range	Total Weight	Mean Weight	Disposition
		1	3.62 -0-	0.01	0.010	released
Total	Number	: 1 N	umber/hr: 3.3	Wt: 0.01	Wt/hr: 0	.033
Morone chrys white bass	ops	Number	Length Range	Total Weight	Mean Weight	Disposition
		1	10.28 -0-	0.50	0.500	released

Total for 1990- 9 Number: 2 Number/hr: 6.67 Wt: 0.5 Wt/hr: 1.70

Collection 1990-10 Upper Twin Sisters
River mile 203.0 to 203.5 Collection date: 09/11/90 Run = 0.46 hrs

Ictiobus cyp		18						
bigmouth buf	ffalo	Numbe	r Length	Range		otal eight	Mean Weight	Disposition
		1	21.81	-0-	_	5.20	5.200	released
Total	Number	r: 1	Number/h	r: 2.2	Wt:	5.20	Wt/hr:11	.304
Lepomis macr	cochirus							
bluegill						otal	Mean	
		Numbe:	r Length	Range	W	eight	Weight	Dispositio
		1	3.78	-0-		0.02	0.020	released
Total	Number	r: 1	Number/h	r: 2.2	Wt:	0.02	Wt/hr: 0	.043
Cyprinus car	pio							
carp		Numbe	m Toneth	Dance		otal	Mean	Disposition
		Numbe.	r Length	Range		eight	Weight	Disposicio
		1	15.47	-0-		1.70	1.700	released
Total	Number	r: 1	Number/h	r: 2.2	Wt:	1.70	Wt/hr: 3	.696
Dorosoma cer	edianur	0						
gizzard shad	1			_		otal	Mean	
		Numbe	Length	Range	We	eight	Weight	Disposition
		8	3.50	3.86		0.15	0.019	released
Total	Number	: 8	Number/h	r: 17.4	Wt:	0.15	Wt/hr: 0	.326
Carpiodes ca	rnio							
river carpsu						otal	Mean	
river carpsu		Numbe	r Length	Range		otal eight	Mean Weight	Disposition
river carpsu		Numbe:	Length	Range	We			Disposition released
river carpsu Total		1		-0-	We	eight	Weight	released
Total	Number Dalus	1	3.23	-0-	Wt:	0.00	Weight -0-	released
Total	Number Dalus	1 r: 1	3.23 Number/h	-0- r: 2.2	Wt:	-0- 0.00	weight -0- Wt/hr: 0	released
Total	Number Dalus	1	3.23 Number/h	-0- r: 2.2	Wt:	0.00	Weight -0- Wt/hr: 0	released
Total	Number Dalus	1 r: 1 Number	3.23 Number/h	-0- r: 2.2	Wt:	-0- 0.00	weight -0- Wt/hr: 0	released
Total	Number Dalus	1 r: 1	3.23 Number/h	-0- r: 2.2 Range	Wt:	0.00 otal	weight -0- Wt/hr: 0 Mean Weight	released
Total	Number Dalus	1 r: 1 Number	3.23 Number/h	-0- r: 2.2 Range	Wt:	0.00 otal eight	Weight -0- Wt/hr: 0 Mean Weight 0.400	released .000 Dispositio
Total	Number Dalus	Number	3.23 Number/h r Length 8.86 12.05	-0- r: 2.2 Range	Wt:	0.00 otal eight 0.40 0.90	Weight -0- Wt/hr: 0 Mean Weight 0.400 0.900	released .000 Dispositio
Ictiobus bub	Number Dalus	1 Number 1 1 1 1 1	3.23 Number/h r Length 8.86 12.05 12.72	-0- r: 2.2 Range	Wt:	0.00 otal eight 0.40 0.90 1.00	Weight -0- Wt/hr: 0 Mean Weight 0.400 0.900 1.000	released .000 Disposition released released released released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 25

				- u			
		1	16.22	-0-	2.60	2.600	released
Total	Number	: 7	Number/h	r: 15.2	Wt: 9.80	Wt/hr:21	.304
Morone saxa		M. ch	rysops				
striped bas	8	Number	r Length	Range	Total Weight	Mean Weight	Dispositio
		1	9.06	-0-	0.35	0.350	released released
Total	Number	: 2	Number/h	r: 4.3	Wt: 1.05	Wt/hr: 2	. 283
Alosa chrys		3					
skipjack her	rring				Total	Mean	
	-	Number	r Length	Range	Weight	Weight	Dispositio
		6	3.39	3.62	0.05	0.008	released
Total	Number	: 6	Number/h	r: 13.0·	Wt: 0.05	Wt/hr: 0	. 109
Morone chry	sops						
white bass		Number	r Length	Range	Total Weight	Mean Weight	Disposition
		1	4.88	-0-	0.03	0.030	released
		ī	11.26	-0-	0.70	0.700	released
		ī	11.61	-0-	0.85	0.850	released
		ī	12.95	-0-	1.28	1.280	released
		ī	13.27	-0-	1.30	1.300	released
		1	13.43	-0-	1.28	1.280	released
Total	Number	: 6	Number/h	r: 13.0	Wt: 5.44	Wt/hr:11.	826

Total for 1990-10 Number: 33 Number/hr: 71.74 Wt:23.4 Wt/hr:50.89

Collection 1990-11 Lower Twin Sisters
River mile 202.6 to 203.2 Collection date: 09/11/90 Run = 0.47 hrs

Ictiobus cy		us		_			
bigmouth bu	ffalo	Numbe	r Length Ra		otal Jeight	Mean Weight	Disposition
		1 1	16.54 -0 17.52 -0		2.50	2.500	released released
Total	Number	r: 2	Number/hr:	4.3 Wt:	6.10	Wt/hr:12	.979
Lepomis mac	rochirus	s					
bluegill		Numbe	r Length Ra		otal eight	Mean Weight	Disposition
		1	5.91 -0 6.69 -0		0.18 0.26	0.180 0.260	released released
Total	Number	r: 2	Number/hr:	4.3 Wt:	0.44	Wt/hr: 0	.936
Aplodinotus		ens					
freshwater	drum	Numbe	r Length Ra		otal eight	Mean Weight	Dispositio
		1	6.61 -0)-	0.12	0.120	released
Total	Number	r: 1	Number/hr:	2.1 Wt:	0.12	Wt/hr: 0	.255
Moxostoma e		um					
golden redh	orse	Numbe	r Length Ra		otal eight	Mean Weight	Disposition
		1	8.58 -0		-0-	-0-	released
		1	12.91 -0 13.35 -0		0.82	0.820 0.930	released released
Total	Number	r: 3	Number/hr:	6.4 Wt:	1.75	Wt/hr: 3	.723
Dorosoma ce	pedianu	1					
gizzard shad	d	Numbe	r Length Ra		otal eight	Mean Weight	Disposition
		3	3.23 3	.66	0.03	0.010	released
Total	Number	r: 3	Number/hr:	6.4 Wt:	0.03	Wt/hr: 0	.064
Micropterus		les					
	bass				otal	Mean	
largemouth 1		Numbe	r Length Ra	inge W	eight	Weight	Disposition

Total	Number:	1	Number/hr		2.1	Wt: 0.70	Wt/hr: 1	. 489
Ictiobus bul	balus							
smallmouth	buffalo					Total	Mean	
	N	umbei	Length	Ran	ge	Weight	Weight	Disposition
	_	1	9.76	-0-	_	0.44	0.440	released
		1	11.02	-0-		0.68	0.680	released
		1	11.22	-0-		0.72	0.720	released
		1	11.69	-0-		0.75	0.750	released
		1		-0-		0.97	0.970	released
	_	1	13.58	-0-		1.35	1.350	released
Total	Number:	6	Number/hr	: 1	2.8	Wt: 4.91	Wt/hr:10	.447
Morone saxat		. chi	ysops					
striped base						Total	Mean	
	Nu	ımbeı	Length	Ran	ge	Weight	Weight	Disposition
		1	6.81	-0-		0.18	0.180	released
		1	6.81	-0-		0.15	0.150	released
		1	11.73	-0-		0.92	0.920	released
Total	Number:	3	Number/hr	:	6.4	Wt: 1.25	Wt/hr: 2	. 660
Alosa chrys	ochloris							
skipjack her						Total	Mean	
		umber	Length	Ran	ge	Weight	Weight	Disposition
	_	3	3.27	3.	50	0.03	0.010	released
Total	Number:	3	Number/hr	:	6.4	Wt: 0.03	Wt/hr: 0	.064
Morone chrys	sops							
white bass	-					Total	Mean	
	N	ımber	Length	Ran	ge	Weight	Weight	Disposition
		1	5.31	-0-		0.07	0.070	released
		1	6.42	-0-		0.13	0.130	released
		1	6.89	-0-		0.25	0.250	released
		1	6.97	-0-		0.28	0.280	released
		1		-0-		0.20	0.200	released
		1		-0-		0.40	0.400	released
		1		-0-		0.90	0.900	released
		1		-0-		1.12	1.120	released
		1	12.99	-0-		1.10	1.100	released
Total	Number:	9	Number/hr	: 1	9.1	Wt: 4.45	Wt/hr: 9.	468

Total for 1990-11 Number: 33 Number/hr: 70.21 Wt:19.8 Wt/hr:42.09

1990 Electrofishing Summary Lengths in inches and weights in pounds

Lepomis mac	rochirus						
bluegill	N	lumber	Length F	lange	Total Weight	Mean Weight	Disposit
	-	1	1.77 -	-0-	-0-	-0-	released
		1		-0-	-0-	-0-	released
		1		-0-	0.01	0.010	released
		1		-0-	0.10		
Total	Number:	4	Number/hr:	7.8	Wt: 0.11	Wt/hr: 0.	. 216
Pimephales v					Total	Mean	
Dulinead min		lumber	Length F	lange	Weight	Weight	Disposit
	_	1		-0-	-0-	-0-	preserve
		1		-0-	-0-	-0-	preserve
	_	1	2.87 -	-0-	-0-		preserve
Total	Number:	: 3	Number/hr:	5.9	Wt: 0.00	Wt/hr: 0	.000
Cyprinus ca	rpio						
carp					Total	Mean	Dianecia
		lumber	Length F	kange	Weight	Weight	Disposit
		1		-0-	0.10	0.100	released
		1		-0-	0.75	0.750	released
		1		-0-	0.78	0.780	released
		1		-0 -	1.50 2.45	1.500 2.450	released
	-						
Total	Number:	5	Number/hr:	9.8	Wt: 5.58	Wt/hr:10	.941
Ictalurus po					Total	Mean	
Channel Cat		lumber	Length F	Range	Weight	Weight	Disposit
	_	1		-0-	0.45	0.450	released
	_	1	14.37 -	-0-	0.95	0.950	released
Total	Number:	2	Number/hr:	3.9	Wt: 1.40	Wt/hr: 2	.745
Pylodictis							
flathead ca		Jumber	Length F	Range	Total Weight	Mean Weight	Disposit
	_	Tumber	Telldril i				
		1	16.73 -	-0-	1.90	1.900	released
	_						
		_				124 /h	
Total	Number	1	Number/hr:	2.0	Wt: 1.90	Wt/hr: 3	.725

Aplodinotus grunniens

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 29

Aplodinotus		ens					
freshwater	arum	Numb	er Lengtl	Range	Total Weigh	Mean t Weight	Disposition
		1	3.27	-0-	-0-	-0-	released
		1		-0-	0.0		
		1		-0-	0.0		
		1	12.68	-0-	0.9	0.900	released
Total	Numbe	r: 4	Number/1	nr: 7.	8 Wt: 0.9	Wt/hr:	1.843
Lepomis cya							
green sunfi	sh			_	Total	Mean	
		Numb	er Length	Range	Weigh	Weight	Disposition
		1		-0-	-0-	-0-	released
		1	2.20	-0-	-0-	-0-	released
Total	Numbe	r: 2	Number/h	nr: 3.9	9 Wt: 0.0	Wt/hr:	0.000
Dorosoma ce		m					
gizzard sha	a	N			Total	Mean	Disease
		Numb	er Lengti	Range	Weigh	Weight	Disposition
		10	3.15	3.46	0.1	0.015	released
Total	Numbe	r: 10	Number/h	nr: 19.	6 Wt: 0.1	5 Wt/hr:	0.294
Micropterus		des					
largemouth	bass				Total	Mean	
		Numb	er Lengti	Range	Weigh	Weight	Disposition
		1	4.53	-0-	0.0	0.030	released
		1		-0-	0.0	0.080	released
		1		-0-	1.3		
		1	16.22	-0-	2.3	2.350	released
Total	Numbe	r: 4	Number/h	r: 7.8	8 Wt: 3.8	Wt/hr:	7.510
Carpiodes c							
river carps	ucker				Total	Mean	
		Numb	er Length	Range	Weight	Weight	Disposition
		1		-0-	0.1	0.120	released
		1		-0-	0.20	0.200	released
		1		-0-	0.3	0.350	
		1		-0-	0.50		
		1		-0-	0.60		
		1		-0-	1.10		
		1	13.90	-0-	1.24	1.240	released
Total	Numbe	r: 7	Number/h	r: 13.7	7 Wt: 4.1	Wt/hr:	8.059
Ictiobus bu							
smallmouth :	buffalo				Total	Mean	
		Numb	er Length	Range	Weight	: Weight	Disposition

fay 1991	_				g Summary		Page A- 30
	Le	ngths	in inches	s and we	ights in p	ounds	
		1	4.84	-0-	0.05	0.050	released
		1	5.79	-0-	0.12	0.120	released
		1	5.79	-0-	0.10	0.100	released
		1	6.89	-0-	0.26	0.260	released
		1	7.32	-0	0.19	0.190	released
		1	8.86	-0-	0.30	0.300	released
Total	Number	: 6	Number/h	r: 11.8	Wt: 1.02	Wt/hr: 2	.000
Morone chrys	sops						
white bass	_				Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	2.99	-0-	0.03	0.030	released
		1	3.70	-0-	0.02	0.020	released
		1	3.82	-0-	0.02	0.020	released
		1	5.12	-0-	0.06	0.060	released
Total	Number	: 4	Number/hi	7.8	Wt: 0.13	Wt/hr: 0	.255
Pomoxis annu	ılaris						
white crapp:	ie				Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	2.83	-0-	-0-	-0-	released

Total for 1990-12 Number: 53 Number/hr:103.92 Wt:19.2 Wt/hr:37.59

Ictiobus cyp	rinellus		,					
bigmouth buf	falo	umber	Length	Range		tal ight	Mean Weight	Disposition
	_	1	14.80	-0-		2.10	2.100	released
Total	Number:	1 N	Number/h	r: 1.5	Wt:	2.10	Wt/hr: 3	.231
Lepomis macr	ochirus							
bluegill	17.	ımber	T	D		tal	Mean Weight	Disposition
	N	TWDer	Length	Range	we	ight	weight	DISPOSICION
		6	1.65	2.56		0.03	0.005	released
		10	3.15	4.37		0.40	0.040	released
		4	4.53	5.67		0.40	0.100	released
		1	5.71	-0-		0.14	0.140	released
	_	1	6.14	-0-		0.19	0.190	released
Total	Number:	22 N	Number/h	r: 33.8	Wt:	1.16	Wt/hr: 1	.785
Cyprinus car	pio							
carp	_				To	tal	Mean	
	N	umber	Length	Range	We	ight	Weight	Disposition
	_	1	4.88	-0-		0.05	0.050	released
		ī	8.03	-0-		0.26	0.260	released
		ī	12.64	-0-		0.96	0.960	released
		ī	12.80	-0-		1.37	1.370	released
		1	13.19	-0-		1.15	1.150	released
		1	15.12	-0-		1.80	1.800	released
		1	16.97	-0-		2.10	2.100	released
		1	18.39	-0-		3.20	3.200	released
		1	23.66	-0-		5.30	5.300	released
Total	Number:	9 N	lumber/h	r: 13.8	Wt:1	6.19	Wt/hr:24	. 908
Ictalurus pu	nctatus							
channel catf					To	tal	Mean	
	N	umber	Length	Range	We	ight	Weight	Disposition
	_	1	12.68	-0-	_	0.70	0.700	released
		ī	14.57	-0-		0.97	0.970	released
Total	Number:	2 N	lumber/h	r: 3.1	Wt:	1.67	Wt/hr: 2	. 569
Notropis ath	erinoides	3						
emerald shin					To	tal	Mean	
		umber	Length	Range		ight	Weight	Disposition
	_	1	1.54	-0-		0-	-0-	preserved
		_	1.54	-0-	-	U-	-0-	Dissilved

1990 Electrofishing Summary $$\operatorname{Page}\ \lambda-\ 32$$ Lengths in inches and weights in pounds

	Number	1	Number/hr: 1.5	Wt: 0.00	Wt/hr: 0	.000
Aplodinotus		าร				
freshwat e r d				Total	Mean	D1141
	1	1umbe:	r Length Range	Weight	Weight	Disposition
	-	1	3.03 -0-	0.01	0.010	released
		6	3.23 3.74	0.01	0.015	released
		1	3.39 -0-	0.03	0.020	released
		1	5.31 -0-	0.02	0.020	released
		1	5.83 -0-	0.10	0.100	released
		ī	6.30 -0-	0.11	0.110	released
		ī	7.48 -0-	0.16	0.160	released
		ī	7.56 -0-	0.20	0.200	released
Total	Number:			Wt: 0.75	Wt/hr: 1	154
			Number/hr: 20.0	WC: 0.75	WC/III: 1:	154
Moxostoma er golden redho		0		Total	Mean	
Actuent remin		lumbei	Length Range	Weight	Weight	Disposition
	-					
		1	12.52 -0-	0.74	0.740	released
		1	12.60 -0-	0.83	0.830	released
Total	Number	2	Number/hr: 3.1	Wt: 1.57	Wt/hr: 2	.415
Lepomis cyan	ellus					
green sunfis	sh			Total	Mean	
	1	lumbe	r Length Range	Weight	Weight	Disposition
	-	4	1.42 2.80	-0-	-0-	released
		6		-0-		
			3.54 3.98	0.20	0.033	released
Total	Numbers		3.54 3.98 Number/hr: 15.4	0.20 Wt: 0.20	0.033	
Total	Number		3.54 3.98 Number/hr: 15.4	0.20 Wt: 0.20	0.033 Wt/hr: 0.	
Dorosoma cep	edianum			Wt: 0.20	Wt/hr: 0.	
Dorosoma cep	edianum	: 10	Number/hr: 15.4	Wt: 0.20	Wt/hr: 0.	308
Dorosoma cep	edianum		Number/hr: 15.4	Wt: 0.20	Wt/hr: 0.	308
Dorosoma cep	edianum	: 10	Number/hr: 15.4	Wt: 0.20 Total Weight	Wt/hr: 0. Mean Weight	Disposition
Dorosoma cep	edianum	10	Number/hr: 15.4	Wt: 0.20 Total Weight 0.04	Mean Weight 0.020	Disposition released
Dorosoma cep	edianum	10 Number	Number/hr: 15.4 Length Range 2.87 4.13 4.17 -0-	Wt: 0.20 Total Weight 0.04 0.02	Mean Weight 0.020 0.020	Disposition released released
Dorosoma cep	edianum	2 1 1 1	Number/hr: 15.4	Total Weight 0.04 0.02 0.20	Mean Weight 0.020 0.020 0.200	Disposition released released released
Dorosoma cep	edianum	2 1 1 1 1	Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.71 -0-	Total Weight 0.04 0.02 0.20 0.41	Mean Weight 0.020 0.020 0.200 0.410	Disposition released released released released released
Dorosoma cep	edianum	2 1 1 1 1 1 1 1	Number/hr: 15.4 Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.87 -0- 10.87 -0-	Total Weight 0.04 0.02 0.20 0.41 0.42	Mean weight 0.020 0.020 0.200 0.410 0.420	Disposition released
Dorosoma cep	edianum	2 1 1 1 1 1 1 1	Number/hr: 15.4 Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.71 -0- 10.87 -0- 11.26 -0-	Total Weight 0.04 0.02 0.20 0.41 0.42 0.38	Mean weight 0.020 0.020 0.200 0.410 0.420 0.380	Disposition released
Dorosoma cep	edianum	2 1 1 1 1 1 1 1	Number/hr: 15.4 Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.87 -0- 10.87 -0-	Total Weight 0.04 0.02 0.20 0.41 0.42	Mean weight 0.020 0.020 0.200 0.410 0.420	Disposition released
Dorosoma cep	edianum	2 1 1 1 1 1 1 1	Number/hr: 15.4 Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.71 -0- 10.87 -0- 11.26 -0-	Total Weight 0.04 0.02 0.20 0.41 0.42 0.38	Mean weight 0.020 0.020 0.200 0.410 0.420 0.380	Disposition released
Dorosoma cep gizzard shad Total	edianum Number:	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.71 -0- 10.87 -0- 11.26 -0- 11.34 -0-	Total Weight 0.04 0.02 0.20 0.41 0.42 0.38 0.50 Wt: 1.97	Mt/hr: 0. Mean weight 0.020 0.020 0.200 0.410 0.420 0.380 0.500 Wt/hr: 3	Disposition released
Dorosoma cep gizzard shad Total	Number:	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Number/hr: 15.4 Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.87 -0- 11.26 -0- 11.34 -0- Number/hr: 12.3	Total Weight 0.04 0.02 0.41 0.42 0.38 0.50 Wt: 1.97	Mt/hr: 0. Mean Weight 0.020 0.200 0.410 0.420 0.380 0.500 Wt/hr: 3.	Disposition released
Dorosoma cep gizzard shad Total	Number:	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Number/hr: 15.4 Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.87 -0- 11.26 -0- 11.34 -0- Number/hr: 12.3	Total Weight 0.04 0.02 0.20 0.41 0.42 0.38 0.50 Wt: 1.97	Mt/hr: 0. Mean weight 0.020 0.020 0.200 0.410 0.420 0.380 0.500 Wt/hr: 3	Disposition released
Dorosoma cep gizzard shad Total	Number:	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Number/hr: 15.4 Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.87 -0- 11.26 -0- 11.34 -0- Number/hr: 12.3	Total Weight 0.04 0.02 0.41 0.42 0.38 0.50 Wt: 1.97	Mt/hr: 0. Mean Weight 0.020 0.200 0.410 0.420 0.380 0.500 Wt/hr: 3.	Disposition released
Dorosoma cep gizzard shad Total	Number:	Vumber 2 1 1 1 1 1 1 Ses	Number/hr: 15.4 T Length Range 2.87 4.13 4.17 -0- 8.70 -0- 10.87 -0- 11.26 -0- 11.34 -0- Number/hr: 12.3	Total Weight 0.04 0.02 0.20 0.41 0.42 0.38 0.50 Wt: 1.97 Total Weight	Wt/hr: 0. Mean Weight 0.020 0.020 0.410 0.420 0.380 0.500 Wt/hr: 3.	Disposition released released released released released released released released released

1990 Electrofishing Summary

Page A- 33

Lengths in inches and weights in pounds 0.150 released 1 6.46 -0-0.15 0.320 released 0.32 1 8.27 -0-Number/hr: Wt: 0.75 Wt/hr: 1.154 Total Number: 9.2 Carpiodes carpio river carpsucker Total Mean Disposition Weight Length Range Weight Number 1.38 -0-1.380 released 1 14.96 1.62 released 15.39 -0-1.620 1 Wt/hr: 4.615 Total Number: Number/hr: 3.1 Wt: 3.00 Ictiobus bubalus smallmouth buffalo Total Mean Disposition Weight Number Length Range Weight -0-0.25 0.250 released 1 7.80 released 11.02 -0-0.65 0.650 1 0.90 0.900 released 1 11.85 -0-14.57 -0-1.67 1.670 released 1 2.410 16.81 -0-2.41 released Total Number: Number/hr: 7.7 Wt: 5.88 Wt/hr: 9.046 Stizostedion canadense Mean sauger Total Weight Weight Disposition Number Length Range 0.07 0.070 preserved 1 3.07 -0-Wt: 0.07 Wt/hr: 0.108 Total Number/hr: 1.5 Number: Morone saxatilis x M. chrysops striped bass Total Mean Weight Disposition Number Length Range Weight 0.40 0.400 released 9.17 -0-1 Wt: 0.40 Wt/hr: 0.615 Total Number: Number/hr: 1.5 Notropis hudsonius Total Mean spotail shiner Number Length Range Weight Weight Disposition 1 2.56 -0--0--0preserved Wt: 0.00 Wt/hr: 0.000 Total Number: Number/hr: 1.5 Morone chrysops white bass Total Mean Length Range Weight Weight Disposition Number 0.14 0.020 7 2.83 3.94 released -0--0-1 3.19 -0preserved

5.51

5.31

3

0.22

0.073

released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 34

		1	9.45	-0-	0.50	0.500	released
Total	Number	: 12	Number/h	r: 18.5	Wt: 0.86	Wt/hr: 1	. 323
Pomoxis ann							
white crapp		Number	Length	Range	Total Weight	Mean Weight	Disposition
wnite crapp.		Number 1	3.39 8.66	-0-			Disposition released released

Total for 1990-13 Number: 98 Number/hr:150.77 Wt:36.9 Wt/hr:56.82

Collection 1990-14 Lower Peoria Lake
River mile 163.0 to 163.5 Collection date: 09/12/90 Run = 0.57 hrs

Lepomis macrochi bluegill	rus Number	Length	Range	Total Weight	Mean Weight	Dispositio
		2.87	3.46	0.03	0.015	released
	2	3.98	4.17	0.06	0.030	released
	6	4.53	5.20	0.46	0.077	released
	5	5.24	5.59	0.57	0.114	released
Total Num	ber: 15	Number/h	r: 26.3	Wt: 1.12	Wt/hr: 1	. 965
Cyprinus carpio						
carp				Total	Mean	
	Number	Length	Range	Weight	Weight	Dispositio
	1	10.71	-0-	0.62	0.620	released
	1	10.94	-0-	0.68	0.680	released
	1	11.14	-0-	0.60	0.600	released
	1	11.42	-0-	0.62	0.620	released
	1	12.52	-0-	0.95	0.950	released
	1	12 52	-0-	0.78	0.780	released
	1	12 5	-0-	0.90	0.900	released
	1	13.78	-0-	1.20	1.200	released
	1	13.98	-0-	1.15	1.150	released
	1	14.37	-0-	1.27	1.270	released
	1	14.41	-0-	1.55	1.550	released
	1	14.49	-0-	1.40	1.400	released
	1	14.61	-0-	1.55	1.550	released
	1	14.61	-0-	1.45	1.450	released
	ī	14.88	-0-	1.40	1.400	released
	ī	15.16	-0-	1.46	1.460	released
	ī	15.43	-0-	1.75	1.750	released
	ī	15.47	-0-	1.45	1.450	released
	ī	15.59	-0-	1.75	1.750	released
	ī	15.59	-0-	1.75	1.750	released
	ī	16.34	-0-	2.25	2.250	released
	ī	16.38	-0-	2.15	2.150	released
	ī	17.09	-0-	2.05	2.050	released
		17.36	-0-	2.35	2.350	released
	, 1	17.44	-0-	3.02	3.020	released
	i	17.44	-0-	2.65	2.650	released
	1	19.45	-0-	3.90	3.900	released
	1	19.53	-0-	2.55	2.550	released
Total Num		Number/h	r: 49.1	Wt:45.20	Wt/hr:79	

Ictalurus punctatus

channel catfish
Number Length Range

Total Mean Weight Weight

Disposition

1990 Electrofishing Summary Page λ - 36 Lengths in inches and weights in pounds $1 \hspace{0.2in} 12.91 \hspace{0.2in} -0 \hspace{0.2in} 0.62 \hspace{0.2in} 0.620 \hspace{0.2in} \text{released}$

		1	12.91	-0-		0.62	0.620	released
Total	Number	: 1 1	Number/h	r: 1.8	Wt:	0.62	Wt/hr: 1	.088
Aplodinotus	grunnie	ens						
freshwater d	lrum				To	tal	Mean	
		Number	Length	Range	We	ight	Weight	Disposition
		4	3.35	4.13		0.07	0.018	released
		1	5.12	-0-		0.05	0.050	released
		1	7.80	-0-		0.18	0.180	released
		1	10.08	-0-		0.40	0.400	released
		1	10.20	-0-		0.45	0.450	released
		ī	11.02	-0-		0.60	0.600	released
Total	Number	: 9 1	Number/h	r: 15.8	Wt:	1.75	Wt/hr: 3	.070
Moxostoma en	vthruru	ım						
golden redho					To	tal	Mean	
,		Number	Length	Range	We	ight	Weight	Disposition
		1	11.26	-0-	_	0.55	0.550	released
Total	Number	r: 1	Number/h	r: 1.8	Wt:	0.55	Wt/hr: 0	.965
Lepomis cyar	nellus							
green sunfis					To	tal	Mean	
920011 2411221		Number	Length	Range	We	ight	Weight	Disposition
		1	3.23	-0-		0.01	0.010	released
		3	4.37	4.92		0.19	0.063	released
		ĭ	4.57	-0-		0.04	0.040	released
		2	5.51	6.50		0.30	0.150	released
Total	Number	r: 7	Number/h	r: 12.3	Wt:	0.54	Wt/hr: 0	.947
Dorosoma ce	nedianu	m.						
gizzard sha		-			То	tal	Mean	
gizzaia sna	•	Number	Length	Range		ight	Weight	Disposition
		32	3.35	3.98		0.62	0.019	released
		3	3.35	3.94		0.06	0.020	released
		7	4.13	4.53		0.18	0.026	released
		4	5.98	6.69		0.34	0.085	released
		6	7.52	8.90		1.05	0.175	released
		i	7.91	-0-		0.15	0.150	released
Total	Numbe	r: 53	Number/h	r: 93.0	Wt:	2.40	Wt/hr: 4	.211
Micropterus	salmoi	des						
largemouth					To	tal	Mean	
-argomouth /		Number	Length	Range		ight	Weight	Disposition
					_	0.40	0.400	released
		1	9.37	-0-		0.40	0.860	released
		1	11.81	-0-		0.86		released
		1	12.36	-0-		1.05	1.050	released
		1	13.43	-0-		1.50	1.500	rereased

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 37

		1	15.00	-0-	1.97	1.970	released
Total	Number	: 5	Number/h	r: 8.8	Wt: 5.78	Wt/hr:10	.140
Carpiodes ca							
river carps					Total	Mean	
		Numbe	r Length	Range	Weight	Weight	Disposition
		1	13.62	-0-	1.23	1.230	released
		1	14.17	-0-	1.50	1.500	released
		1	15.79		1.58	1.580	released
		1	15.91	-0-	1.65	1.650	released
Total	Number	: 4	Number/h	r: 7.0	Wt: 5.96	Wt/hr:10	.456
Ictiobus bul	oalus						
smallmouth 1	ouffalo				Total	Mean	
		Numbe	r Length	Range	Weight	Weight	Disposition
		1	13.66	-0-	1.30	1.300	released
Total	Number		13.66 Number/h		1.30 Wt: 1.30	1.300 Wt/hr: 2	
Total Stizostedio		: 1					
		: 1					
Stizostedio	n canade	: 1	Number/h		Wt: 1.30	Wt/hr: 2	
Stizostedio	n canade	:: 1	Number/h	r: 1.8	Wt: 1.30	Wt/hr: 2	.281
Stizostedio	n canade	Numbe	Number/h	r: 1.8 Range	Wt: 1.30 Total Weight	Wt/hr: 2 Mean Weight	Disposition preserved
Stizostedion sauger	n canade	Numbe	Number/h	r: 1.8 Range	Wt: 1.30 Total Weight 0.06	Wt/hr: 2 Mean Weight 0.060	Disposition preserved
Stizostedion sauger Total	n canade	Numbe	Number/h	r: 1.8 Range	Wt: 1.30 Total Weight 0.06	Wt/hr: 2 Mean Weight 0.060	Disposition preserved
Stizostedion sauger Total	n canade Number	Numbe	Number/h Length 6.42 Number/h	Range -0- r: 1.8	Wt: 1.30 Total Weight 0.06 Wt: 0.06	Mean Weight 0.060	Disposition preserved
Stizostedion sauger Total	n canade Number	Numbe	Number/h Length 6.42 Number/h	Range -0- r: 1.8	Wt: 1.30 Total Weight 0.06 Wt: 0.06	Mean Weight 0.060 Wt/hr: 0	Disposition preserved

Total for 1990-14 Number:126 Number/hr:221.05 Wt:66.0 Wt/hr:1.2E2

1990 Electrofishing Summary Lengths in inches and weights in pounds

Ictiobus ni					_			
black buffa		Number	Length	Range		otal eight	Mean Weight	Disposition
		1	6.69	-0-		0.15	0.150	released
Total	Number	: 1 }	Number/hr	: 3.2	Wt:	0.15	Wt/hr: 0	. 484
Pomoxis nig		tus			т	otal	Mean	
Didok Grupp		Number	Length	Range		eight	Weight	Disposition
		1	6.81	-0-		0.16	0.160	released
		1	7.24	-0-		0.20	0.200	released
		1	9.88	-0-		0.65	0.650	released
Total	Number	: 3 h	Number/hr	: 9.7	Wt:	1.01	Wt/hr: 3	. 258
Lepomis mac	rochirus							
bluegill						otal	Mean	
		Number	Length	Range	W	eight	Weight	Disposition
		2	1.97	2.80		0.02	0.010	released
		5	3.35	3.66		0.13	0.026	released
		4	3.86	4.37		0.18	0.045	released
		5 1	4.88 6.30	5.43 -0-		0.50	0.100 0.170	released released
Total	Number		Number/hr		W+ ·	1.00	Wt/hr: 3	
		. 17	- Tumber/III	. 54.0	WC.	1.00	#C/III. 3.	. 220
Cyprinus ca carp	rpio				т	otal	Mean	
	1	Number	Length	Range	W	eight	Weight	Disposition
		1	7.76	-0-		0.23	0.230	released
		1	9.61	-0-		0.45	0.450	released
		1	14.21	-0-		1.10	1.100	released
Total	Number	: 3 1	Number/hr	: 9.7	Wt:	1.78	Wt/hr: 5	.742
Aplodinotus		ns						
freshwater						otal	Mean	D11+1
		Number	Length	kange	W	eight	Weight	Disposition
		1	6.30	-0-		0.08	0.080	released
		1	8.58	-0-		0.25	0.250	released
Total	Number	: 2 1	Number/hr	: 6.5		0.33	Wt/hr: 1.	065

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 39

Lepomis cyar green sunfi					Total	Mean	
green sunii	вn	Number	Length	Range	Weigh		Disposition
		2	3.62	3.94	0.0		released
		1	5.63	-0-	0.1	0 0.100	released
Total	Numbe	r: 3	Number/h	r: 9.7	Wt: 0.1	6 Wt/hr: 0	.516
Dorosoma ce		m			m-4-1	W	
gizzard sha	1	Number	Length	Range	Total Weigh		Disposition
				<u> </u>			
		5	3.62	4.53	0.1		released
		4	7.52	9.17	0.7		released
		7	10.31	12.17	2.8	5 0.407	released
Total	Number	r: 16	Number/h	r: 51.6	Wt: 3.6	5 Wt/hr:11	.774
Micropterus		des			m-+-1	W	
largemouth !	Dass	Number	Length	Dance	Total Weigh		Disposition
		Mumper	Dength	Kange	werdi	- Weldir	Disposition
		1	4.06	-0-	0.0	2 0.020	released
		1	12.80	-0-	1.1	3 1.130	released
Total	Numbe	r: 2	Number/h	r: 6.5	Wt: 1.1	5 Wt/hr: 3	.710
Ictiobus bul	balus						
smallmouth					Total		
	•	Number	Length	Range	Weigh	t Weight	Disposition
		1	7.13	-0-	0.1	6 0.160	released
		1	9.06	-0-	0.4		released
		1	10.24	-0-	0.5	5 0.550	released
		1	15.83	-0-	2.1	7 2.170	released
Total	Number	r: 4	Number/h	r: 12.9	Wt: 3.2	8 Wt/hr:10	.581
Lepomis gul	osus						
warmouth				_	Total		
		Number	Length	Range	Weigh	t Weight	Disposition
		1	1.85	-0-	-0-	-0-	preserved
Total	Number	r: 1	Number/h	r: 3.2	Wt: 0.0	0 Wt/hr: 0	.000
Pomoxis anni	laris			-		-	
white crapp:	ie				Total	Mean	
		Number	Length	Range	Weigh	t Weight	Disposition
		1	6.77	-0-	0.1	3 0,130	released
		î	6.89	-0-	0.1		released
		ī	7.52	-0-	0.2		released
		ī	8.35	-0-	0.3		released
		1	8.66	-0-	0.3	2 0.320	released
		1	8.70	-0-	0.3	2 0.320	released

Total	Number: 10	Number/h	r: 32.3	Wt: 3.79	Wt/hr:12	.226
	1	12.20	-0-	1.00	1.000	released
	1	10.04	-0-	0.53	0.530	released
	1	9.61	-0-	0.48	0.480	released
	1	8.90	-0-	0.35	0.350	released
May 1991	1 Lengths	ounds	Page A- 40			

Total for 1990-15 Number: 62 Number/hr:200.00 Wt:16.3 Wt/hr:52.58

Total

Number:

1

Number/hr:

1.9

Wt: 0.10

Wt/hr: 0.189

Collection 1990-16 Pekin Collection date: 09/13/90 Run = 0.53 hrs River mile 154.5 to 154.9 Ictiobus cyprinellus bigmouth buffalo Total Mean Weight Disposition Weight Number Length Range 0.85 0.850 released 1 11.42 -0--0-0.85 0.850 released 1 11.50 released 2.550 1 16.14 -0-2.55 2.90 2.900 released 1 17.17 -0-3.100 3.10 released 1 17.91 -0-Number/hr: Wt/hr:19.340 Total Number: 9.4 Wt:10.25 Lepomis macrochirus Total Mean bluegill Number Length Range Weight Weight Disposition -0-0.05 0.050 released 1 4.17 Number: 1 Number/hr: 1.9 Wt: 0.05 Wt/hr: 0.094 Total Cyprinus carpio Total Mean carp Weight Weight Disposition Number Length Range 0.150 6.73 -0-0.15 released 1 1 7.60 -0-0.20 0.200 released 0.250 1 8.35 -0-0.25 released 0.300 released 1 8.46 -0-0.30 0.30 0.300 relessed 1 8.86 -0-10.63 -0-0.57 0.570 released 1 Wt: 1.77 Wt/hr: 3.340 Total Number: Number/hr: 11.3 Dorosoma cepedianum Total Mean gizzard shad Weight Weight Disposition Number Length Range 3.54 0.35 0.011 released 31 2.95 3.54 0.15 0.015 released 10 3.54 Wt: 0.50 Wt/hr: 0.943 Number: 41 Number/hr: 77.4 Total Micropterus salmoides Total Mean largemouth bass Weight Weight Disposition Number Length Range 0.10 0.100 released 1 6.10 -0-

Total

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 42

Ictiobus bubalu smallmouth buff		er Length	Range	Total Weight	Mean Weight	Disposition
	1	9.45 9.76	-0-	0.35	0.350	released released
Total Nu	mber: 2	Number/h	Number/hr: 3.8		Wt/hr: 1	.415
Alosa chrysochl skipjack herrin		er Length	Range	Total Weight	Mean Weight	Disposition
	6	3.82	4.25	0.08	0.013	released
Total Nu	mber: 6	Number/h	r: 11.3	Wt: 0.08	Wt/hr: 0	.151
Morone chrysops white bass	Numbe	er Length	Range	Total Weight	Mean Weight	Disposition
	5 4 2 1	3.15 3.74 4.09 5.75 7.64	3.54 5.12 4.45 -0-	0.07 0.15 0.05 0.08 0.25	0.014 0.038 0.025 0.080 0.250	released released released released released
	ī	11.54	-0-	0.75	0.750	released

Number: 14 Number/hr: 26.4 Wt: 1.35 Wt/hr: 2.547

Total for 1990-16 Number: 76 Number/hr:143.40 Wt:14.8 Wt/hr:28.02

bigmouth but	prinell ffalo	us				Total	Mean	
		Nu	mber	Length	Range	Weight	Weight	Disposition
			1	10.75	-0-	0.84	0.840	released
Total	Numbe	r:	1 N	umber/h	r: 2.1	Wt: 0.84	Wt/hr: 1	.787
Pomoxis nigr		atu	s					
black crappi	ie	Nui	nber	Length	Range	Total Weight	Mean Weight	Dispositio
			1	6.97	-0-	0.18	0.180	released
Total	Numbe	r:	1 N	umber/h	r: 2.1	Wt: 0.18	Wt/hr: 0	.383
Lepomis macr	rochiru	3						,
bluegill		Nu	mber	Length	Range	Total Weight	Mean Weight	Dispositio
			3	1.93	2.09	-0-	-0-	released
			1	3.35 7.01	3.74 -0-	0.10 0.25		released released
Total	Numbe	<u>-</u>	8 N	umber/h	r: 17.0	Wt: 0.35	Wt/hr: 0	.745
Cyprinus car	pio							
carp		Nu	ber	Length	Range	Total Weight	Mean Weight	Dispositio
			1	8.78	-0-	0.30		released
			1	8.94	-0-	0.34	0.340	released
			1	15.08 15.43	-0-	1.70 1.65	1.700 1.650	released released
			i	15.43	-0-	1.85	1.850	released
			ī	16.18	-0-	1.80	1.800	released
			ī	16.46	-0-	2.05	2.050	released
Total	Numbe	r:	7 N	umber/h	r: 14.9	Wt: 9.69	Wt/hr:20	,617
Aplodinotus freshwater d		ens				Total		
ITESHWALET C	II UM	Nur	ber	Length	Range	Weight	Mean Weight	Dispositio
			1	8.58	-0-	0.26	0.260	released
			1	15.00				

Lepomis cyar	11						
green sunfis		Numbe	r Tongth	Range	Total Weight	Mean Weight	Disposition
		Numbe	- Deligeli		Weight		
		2	1.85	1.85	-0-	-0-	released
Total	Numbe	r: 2	Number/h	r: 4.3	Wt: 0.00	Wt/hr: 0	.000
Dorosoma cej		m					
gizzard shad	d	Numbe	r Length	Range	Total Weight	Mean Weight	Disposition
		2	3.39	3.54	0.01	0.005	released
Total	Numbe	r: 2	Number/h	r: 4.3	Wt: 0.01	Wt/hr: 0	.021
Micropterus		des					
largemouth 1	bass	Numbe	r Length	Range	Total Weight	Mean Weight	Disposition
		1	13.19	-0-	1.30	1.300	released
Total	Numbe	r: 1	Number/h	r: 2.1	Wt: 1.30	Wt/hr: 2	.766
Percina cap	rodes						
logperch		Numbe	r Length	Range	Total Weight	Mean Weight	Disposition
		1	2.76	-0-	-0-	-0-	released
Total	Numbe	r: 1	Number/h	r: 2.1	Wt: 0.00	Wt/hr: 0	.000
			•				
Carpiodes ca			<u> </u>				
Carpiodes carps	arpio	Numbe	r Length	Range	Total Weight	Mean Weight	Disposition
	arpio	Numbe	Length	Range	Total		Disposition released
	arpio				Total Weight	Weight	
	arpio	1	7.83	-0-	Total Weight	Weight 0.250	released released
Total	arpio ucker Numbe	1 1 r: 2	7.83 10.00 Number/h	-0-	Total Weight 0.25 0.42 Wt: 0.67	0.250 0.420 Wt/hr: 1	released released
Total	arpio ucker Numbe	1 1 r: 2	7.83 10.00 Number/h	-0-	Total Weight 0.25 0.42	0.250 0.420	released released
Total	arpio ucker Numbe	1 1 r: 2	7.83 10.00 Number/h	-0- -0- r: 4.3	Total Weight 0.25 0.42 Wt: 0.67	0.250 0.420 Wt/hr: 1	released released
Total	arpio ucker Numbe	1 1 r: 2 idotum	7.83 10.00 Number/h	-0- -0- r: 4.3	Total Weight 0.25 0.42 Wt: 0.67 Total Weight	Weight 0.250 0.420 Wt/hr: 1 Mean Weight	released released .426 Disposition released
Total Moxostoma m shorthead r Total Alosa chryse	Numbe Numbe Numbe	1 1 1 r: 2 idotum Numbe 1 r: 1	7.83 10.00 Number/h	-0- -0- r: 4.3	Total Weight 0.25 0.42 Wt: 0.67 Total Weight 0.95	Weight 0.250 0.420 Wt/hr: 1 Mean Weight 0.950 Wt/hr: 2	released released .426 Disposition released
Total Moxostoma m shorthead r	Numbe Numbe Numbe	1 1 1 r: 2 idotum Numbe 1 r: 1	7.83 10.00 Number/h or Length 13.39 Number/h	-0- -0- r: 4.3	Total Weight 0.25 0.42 Wt: 0.67 Total Weight 0.95	Weight 0.250 0.420 Wt/hr: 1 Mean Weight 0.950	Disposition released
Total Moxostoma m shorthead r Total Alosa chryse	Numbe Numbe Numbe	1 1 r: 2 idotum Numbe 1 r: 1	7.83 10.00 Number/h or Length 13.39 Number/h	-0- -0- r: 4.3 Range -0- r: 2.1	Total Weight 0.25 0.42 Wt: 0.67 Total Weight 0.95 Wt: 0.95	Weight 0.250 0.420 Wt/hr: 1 Mean Weight 0.950 Wt/hr: 2	released released .426 Disposition released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 45

threadfin shad	Number	Length	Range	Total Weight	Mean Weight	Disposition
	5	3.35	3.86	0.07	0.014	preserved
Total Number	r: 5 N	umber/h	: 10.6	Wt: 0.07	Wt/hr: 0	.149
Morone chrysops				Total	Mean	
white bass	Number	Length	Range	Weight	Weight	Disposition
	3	3.15	4.13	0.05	0.017	released
	3	5.47	5.67	0.20	0.067	released
	2	5.55	5.79	0.15	0.075	released
	1	10.71	-0-	0.60	0.600	released
	1	10.75	-0-	0.55	0.550	released
	1	11.26	-0-	0.65	0.650	released
Total Number	r: 11 N	lumber/hi	: 23.4	Wt: 2.20	Wt/hr: 4	. 681
Pomoxis annularis						
white crappie	Number	Length	Range	Total Weight	Mean Weight	Disposition
	1	3.35	-0-	-0-	-0-	released
Total Number	r: 1 N	umber/h	: 2.1	Wt: 0.00	Wt/hr: 0	000

Total for 1990-17 Number: 48 Number/hr:102.13 Wt:18.3 Wt/hr:38.94

Ictiobus cy		ıs					
bigmouth bu	ffalo	Number	Length	Range	Total Weight	Mean Weight	Dispositi
		1	16.54	-0-	2.80	2.800	released
Total	Number	: 1 1	Number/hr	: 1.6	Wt: 2.80	Wt/hr: 4	.516
Pomoxis nig	romacula	tus					
black crapp:	ie				Total	Mean	
		Number	Length :	Range	Weight	Weight	Dispositi
		1	7.64	-0-	0.28	0.280	released
		ī		-0-	0.82	0.820	released
Total	Number	: 2 1	Number/hr	: 3.2	Wt: 1.10	Wt/hr: 1	.774
Lepomis macr	rochirus	3					
bluegill		Number	Length	Da	Total Weight	Mean Weight	Dispositi
		Number	Dength	Range	weight	weight	DISPOSIC
		8	1.61	2.28	0.03	0.004	released
		2	2.87	3.11	0.03	0.015	released
		1		-0-	0.14	0.140	released
		1		-0-	0.23	0.230	released
			7.17	-0-	0.34	0.340	released
Total	Number	: 13 h	Number/hr	: 21.0	Wt: 0.77	Wt/hr: 1.	. 242
Cyprinus car	rpio				Total	W	
carp		Number	Length 1	Range	Weight	Mean Weight	Dispositi
		1	9.13	-0-	0.44	0.440	released
		ī		-0-	0.80	0.800	released
		1		-0-	0.77	0.770	released
		1		-0-	1.40	1.400	released
		1		-0-	1.60	1.600	released
			16.06	-0-	2.00	2.000	released
Total	Number	: 6 N	lumber/hr	: 9.7	Wt: 7.01	Wt/hr:11.	306
Ictalurus pu		1			m		
channel cati		Number	Length 1	Range	Total Weight	Mean Weight	Dispositi
		1	12.01	-0-	0.57	0.570	released

Notropis at		les				Total	Mean	
emerara sur		Numbe	er Length	Rang	е	Weight	Weight	Disposition
		2 4	1.57	1.6		-0-	-0-	released preserved
Total	Number	r: 6	Number/h	r: 9	.7	Wt: 0.00	Wt/hr: 0	.000
Pylodictis		3						
flathead ca	tiisn	Numbe	er Length	Rang	e	Total Weight	Mean Weight	Disposition
		1	29.72	-0-		13.00	13.000	released
Total	Number	r: 1	Number/h	r: 1	. 6	Wt:13.00	Wt/hr:20	.968
Aplodinotus		ens						
freshwater	drum	Numbe	er Length	Rang	e	Total Weight	Mean Weight	Disposition
		1	7.91	-0-	_	0.22	0.220	released
			7.91	-0-				
Total	Number	: 1	Number/h	r: 1	.6	Wt: 0.22	Wt/hr: 0	.355
Lepomis cya								
green sunfi	sn	Numbe	r Length	Rang	e	Total Weight	Mean Weight	Disposition
		1	3.78	-0-	-	-0-	-0-	released
Total	Number		Number/h		. 6	Wt: 0.00	Wt/hr: 0	
Dorosoma ce								
gizzard sha		Numbe	r Length	Rang	8	Total Weight	Mean Weight	Disposition
		42	2.91	3.7		0.57	0.014	released
		2 14	4.65 5.47	4.9 6.7		0.08	0.040 0.078	released released
Total	Number	: 58	Number/h	r: 93	. 5	Wt: 1.74	Wt/hr: 2	.806
Micropterus		les						
largemouth 1	bass	Numbe	r Length	Rang	е	Total Weight	Mean Weight	Disposition
		1	10.75	-0-	-	0.68	0.680	released
		1	11.93	-0-		1.01	1.010	released
		1	14.69	-0-		1.83	1.830	released
Total	Number	:: 3	Number/h	r: 4	. 8	Wt: 3.52	Wt/hr: 5	. 677
Lepomis hum	ilis							
orangespott	ed sunfi			D	_	Total	Mean	D4 1 1
		Numbe	r Length	Kang	e -	Weight	Weight	Disposition

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 48

		1	2.83	-0-	-0-	-0-	released
Total	Number	: 1	Number/h	r: 1.6	Wt: 0.00	Wt/hr: 0	.000
Alosa chrys	ochloris	1					
skipjack he					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		5	3.78	4.41	0.13	0.026	released
		1	7.32	-0-	0.12	0.120	released
Total	Number	: 6	Number/h	r: 9.7	Wt: 0.25	Wt/hr: 0	. 403
Dorosoma pe	tenense						
threadfin sl	had				Total	Mean	
		Number	. Length	Range	Weight	Weight	Disposition
		7	2.91	3.23	0.07	0.010	released
		5	3.50	3.86	0.08	0.016	released
Total	Number	: 12	Number/h	r: 19.4	Wt: 0.15	Wt/hr: 0	.242
Carpiodes c	yprinus						
quillback					Total	Mean	
		Number	r Length	Range	Weight	Weight	Disposition
		1	8.74	-0-	0.34	0.340	released
Total	Number	: 1	Number/h	r: 1.6	Wt: 0.34	Wt/hr: 0	. 548
Morone chry	sops						
white bass				_	Total	Mean	-1
		Number	Length	Range	Weight	Weight	Disposition
		5	3.98	4.53	0.13	0.026	released
		6	4.92	5.47	0.34	0.057	released
		1	6.54	-0-	0.13	0.130	released
		1	12.05	-0-	0.85	0.850	released
		1	13.54	-0-	1.33	1.330	released
Total	Number	: 14	Number/h		Wt: 2.78	Wt/hr: 4	

Total for 1990-18 Number:127 Number/hr:204.84 Wt:34.3 Wt/hr:55.24

Page A- 49

1990 Electrofishing Summary Lengths in inches and weights in pounds

May 1991

Collection 1990-19 Lower Bath Chute Run = 0.57 hrs River mile 107.0 to 107.3 Collection date: 09/13/90 Ictiobus cyprinellus bigmouth buffalo Total Mean Weight Number Length Range Weight Disposition 1 15.31 -0-2.05 2.050 released 2.710 2.71 released 1 16.10 -0-17.48 -0-3.29 3.290 released 1 1 18.66 -0-4.44 4.440 released Total Number: Number/hr: 7.0 Wt:12.49 Wt/hr:21.912 Ictiobus niger black buffalo Total Mean Number Length Range Weight Weight Disposition 1 11.30 -0-0.79 0.790 released 2.000 1 14.88 -0-2.00 released Total Number: 2 Number/hr: 3.5 Wt: 2.79 Wt/hr: 4.895 Pomoxis nigromaculatus black crappie Total Mean Number Length Range Weight Weight Disposition 1 6.54 -0-0.16 0.160 released 0.160 released 1 6.73 -0-0.16 1 6.85 -0-0.18 0.180 released 1 7.09 -0-0.18 0.180 released 1 7.13 -0-0.21 0.210 released 0.23 1 7.17 -0-0.230 released 1 7.17 -0-0.22 0.220 released 7.32 1 -0-0.24 0.240 released 0.270 1 7.40 -0-0.27 released 1 7.44 -0-0.24 0.240 released 1 7.56 -0-0.28 0.280 released 1 7.80 0.29 0.290 -0released 0.58 0.580 1 9.45 -0released 1 10.35 -0-0.70 0.700 released 10.47 -0-0.78 0.780 released Total Number: 15 Number/hr: 26.3 Wt: 4.72 Wt/hr: 8.281 Lepomis macrochirus bluegill Total Mean Weight Weight Number Length Range Disposition 1.89 -0--0--0-1 released released 2 2.01 2.20 -0--0-3 3.66 4.49 0.13 0.043 released 5.35 -0-0.15 0.150 released

y 1991	L		O Electrofishi n inches and w		ounds	Page A- 50
		1 1 1	5.71 -0- 6.93 -0- 7.09 -0-	0.14 0.27 0.27	0.140 0.270 0.270	released released released
Total	Numbe	r: 10 N	umber/hr: 17.5	Wt: 0.96	Wt/hr: 1	. 684
Cyprinus car carp	pio	Number	Length Range	Total Weight	Mean Weight	Disposit
		1 1 1	15.47 -0- 15.51 -0- 17.52 -0-	1.86 1.70 2.73	1.860 1.700 2.730	released released released
Total	Numbe:		umber/hr: 5.3		Wt/hr:11	.035
Ictalurus pu channel cati		Number	Length Range	Total Weight	Mean Weight	Disposit
		1	10.24 -0- 12.48 -0-	0.35 0.65	0.350 0.650	released released
Total	Numbe	r: 2 N	umber/hr: 3.5	Wt: 1.00	Wt/hr: 1	.754
emerald shir	ier	Number	Length Range	Total Weight	Weight	Disposit
		-6	1.42 2.01	-0- Wt: 0.00	-0- Wt/hr: 0	
Total	Numbe		umber/hr: 10.5	WC: 0.00	#C/III. 0	
Aplodinotus freshwater		Number	Length Range	Total Weight	Mean Weight	Disposit
		3 1	3.78 4.37 17.09 -0-	0.08 3.00	0.027 3.000	released released
		r: 4 N				404
Total	Numbe	F: 4 F	umber/hr: 7.0	Wt: 3.08	Wt/hr: 5	
Total Lepomis cyar green sunfic	nellus	Number	Length Range	Total Weight	Mean Weight	
Lepomis cya	nellus	Number 4 7	Length Range 2.80 3.27 3.78 4.29	Total Weight 0.07 0.28	Mean Weight 0.018 0.040	Disposit released released
Lepomis cya	nellus	Number 4 7 1	Length Range	Total Weight 0.07 0.28 0.03	Mean Weight	Disposit released released released
Lepomis cyangreen sunfi	nellus sh Numbe	Number 4 7 1 r: 12 N	Length Range 2.80 3.27 3.78 4.29 4.84 4.49	Total Weight 0.07 0.28 0.03	Mean Weight 0.018 0.040 0.030	Disposit released released released
Lepomis cya green sunfi	Numbe	Number 4 7 1 r: 12 N	Length Range 2.80 3.27 3.78 4.29 4.84 4.49	Total Weight 0.07 0.28 0.03	Mean Weight 0.018 0.040 0.030	Disposit released released released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 51

released 2 5.39 6.14 0.14 0.070 Wt/hr: 0.404 Wt: 0.23 Total Number: 9 Number/hr: 15.8 Micropterus salmoides Total Mean largemouth bass Disposition Number Length Range Weight Weight released 4.92 -0-0.07 0.070 1 0.09 5.55 0.090 released 1 -0-0.45 0.450 released 1 9.53 -0-0.74 0.740 released 1 10.87 -0-11.54 0.86 0.860 released 1 -0-0.960 released 1 12.13 -0-0.96 1.040 released 1.04 1 12.52 -0-1 14.96 -0-1.78 1.780 released 2.220 released 1 15.47 -0-2.22 Number/hr: 15.8 Wt: 8.21 Wt/hr:14.404 Total Number: 9 Lepisosteus osseus longnose gar Total Mean Weight Disposition Weight Number Length Range 0.44 0.440 released 1 15.55 -0-Total Number: 1 Number/hr: 1.8 Wt: 0.44 Wt/hr: 0.772 Carpiodes carpio Total Mean river carpsucker Number Length Range Weight Weight Disposition 1.05 1.050 released 1 12.87 -0-1.10 1.100 released 1 13.19 -0-Wt/hr: 3.772 Total Number: 2 Number/hr: 3.5 Wt: 2.15 Ictiobus bubalus smallmouth buffalo Total Mean Number Weight Disposition Length Range Weight 0.510 released 9.84 -0-0.51 1 0.81 0.810 released 1 11.97 -0-0.970 0.97 released 1 12.09 -0-Wt: 2.29 Wt/hr: 4.018 Total Number: 3 Number/hr: 5.3 Alosa chrysochloris Total Mean skipjack herring Weight Disposition Number Length Range Weight 0.07 0.018 released 4 3.19 4.92 7.40 0.19 0.095 released 2 6.50 Wt: 0.26 Wt/hr: 0.456 Total Number: 6 Number/hr: 10.5

	٠	^	^	٠
May	_	,	9	+

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 52

Dorosoma pete threadfin sha		Number	Length	Range	Total Weight	Mean Weight	Disposition
		13	2.95	3.58	0.15	0.012	released
Total	Number	: 13	Number/h	r: 22.8	Wt: 0.15	Wt/hr: 0	. 263
Morone chrys	ps						
white bass		Number	Length	Range	Total Weight	Mean Weight	Disposition
		2	3.82	4.09	0.05	0.025	released
		ī	7.80	-0-	0.23	0.230	released
		1	10.91	-0-	0.65	0.650	released
		1	14.29	-0-	1.34	1.340	released
Total	Number	: 5	Number/h	r: 8.8	Wt: 2.27	Wt/hr: 3	. 982
Pomoxis annul	laris						
white crappie	€ .				Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	10.75	-0-	0.63	0.630	released
Total	Number	: 1	Number/h	r: 1.8	Wt: 0.63	Wt/hr: 1	.105

Total for 1990-19 Number:107 Number/hr:187.72 Wt:48.3 Wt/hr:84.81

					•			0 Run		
Ictiobus cyp						т.	otal	Mean		
Digmodell Du		umbei	. Length	Range	8		eight	Weigh	t	Disposition
	_	1	21.46	-0-	_		5.75	5.75	0	released
Total	Number:	1	Number/h	r: 1.	. 6	Wt:	5.75	Wt/hr:	9.4	426
Pomoxis nig	romaculat	us								
black crapp:		umber	Length	Dange			otal eight	Mean Weight	-	Disposition
			- —		-	-			-	
		1	7.17	-0-			0.23	0.23		released
Total	Number:	1	Number/h	r: 1.	. 6	Wt:	0.23	Wt/hr:	0.3	377
Lepomis mac bluegill		umber	. Length	Range	9		otal eight	Mean Weight	Ł	Disposition
	_	1	1.97	-0-	-	_	-0-	-0-	_	released
	_	1	4.49	-0-			0.07	0.07	<u> </u>	released
Total	Number:	2	Number/h	r: 3.	. 3	Wt:	0.07	Wt/hr:	0.:	115
Cyprinus car carp	-	umber	Length	Range	•		otal sight	Mean Weight	Ŀ	Disposition
		1	11.26	-0-	-		0.67	0.670	5	released
		1	14.45	-0-			1.49	1.490)	released
		1	15.47	-0-			1.55	1.550		released
		1	15.67	-0-			1.72	1.720		released
		1	15.67	-0-			1.43	1.430		released
		1	16.02	-0-			2.09	2.090		released
		i	16.02 16.06	-0-			1.98	1.980		released released
		i	16.38	-0-			2.48	2.480		released
		i	16.42	-0-			2.13	2.130		released
		i	16.81	-0-			1.96	1.96		released
		î	16.97	-0-			1.92	1.920		released
		ī	17.01	-0-			2.06	2.060		released
		ī	17.80	-0-			2.43	2.430		released
		ī	18.35	-0-			2.87	2.870		released
		ī	18.62	-0-			3.28	3.280		released
		1	20.00	-0-			3.65	3.650		released

Ictalurus pu		s					
channel catf	ish	Number	Length	Range	Total Weight	Mean Weight	Disposition
		1	6.54	-0-	0.09	0.090	released
		1	13.35	-0-	0.78	0.780	released
		1	14.37	-0-	1.08	1.080	released
		1	18.66	-0-	2.52	2.520	released
		1	19.57	-0-	2.74	2.740	released
Total	Numbe	r: 5 h	lumber/h	r: 8.2	Wt: 7.21	Wt/hr:11	.820
Notropis ath		des	-		m-+-3		
emerald shin	er	Number	Length	Range	Total Weight	Mean Weight	Disposition
		1	1.77	-0-	-0-	-0-	released
Total	Numbe	r: 1 h	lumber/h	r: 1.6	Wt: 0.00	Wt/hr: 0	.000
Pylodictis o	livari	s					
flathead cat					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	10.59	-0-	0.44	0.440	released
Total	Numbe	r: 1 h	lumber/h	r: 1.6	Wt: 0.44	Wt/hr: 0	.721
Aplodinotus	arunni	ens					
freshwater d					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		2	4.13	4.49	0.11	0.055	released
		1	12.60	-0-	1.06	1.060	released
Total	Numbe	r: 3 N	lumber/h	r: 4.9	Wt: 1.17	Wt/hr: 1.	918
Lepomis cyan	ellus						
green sunfis					Total	Mean	
green banris	•	Number	Length	Range	Weight	Weight	Disposition
		1	3.11	-0-	0.03	0.030	released
Total	Numbe	r: 1 N	Number/h	r: 1.6	Wt: 0.03	Wt/hr: 0.	.049
Dorosoma cep	edianu	m					
gizzard shad					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		2	2.80	3.54	-0-	-0-	released
Total	Numbe	r: 2 N	lumber/h	r: 3.3	Wt: 0.00	Wt/hr: 0.	000
Alosa chryso	chlori	a					
skipjack her		_			Total	Mean	
pjuon liet	9	Number	Length	Range	Weight	Weight	Disposition

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 55

		4	3.70	4.25	0.08	0.020	released
Total	Number	: 4 1	Number/h	r: 6.6	Wt: 0.08	Wt/hr: 0	.131
Dorosoma pe threadfin s	had	Number	Length	Range	Total Weight	Mean Weight	Disposition
		1	3.27	-0-	-0-	-0-	released
Total	Number	: 1 1	Number/h	r: 1.6	Wt: 0.00	Wt/hr: 0	.000
Morone chry white bass	-	Number	Length	Range	Total Weight	Mean Weight	Disposition
		4	4.29 5.20	5.00	0.16	0.040	released released
Total	Number	: 5 h	Number/h	r: 8.2	Wt: 0.22	Wt/hr: 0	.361

Total for 1990-20 Number: 44 Number/hr: 72.13 Wt:50.7 Wt/hr:83.11

Total

Lepomis maci	rochirus	1				
bluegill		Numbe	r Length Rang	Total e Weight	Mean Weight	Dispositio
		5	1.57 2.0	5 -0-	-0-	released
		1	3.82 -0-	0.05	0.050	released
Total	Number	: 6	Number/hr: 8	.2 Wt: 0.05	Wt/hr: 0	.068
Cyprinus car	pio					
carp		Number	Length Rang	Total e Weight	Mean Weight	Dispositio
		-	8.90 -0-	0.35	0.350	released
		1	20.67 -0-	4.60	4.600	released
Total	Number	: 2	Number/hr: 2	.7 Wt: 4.95	Wt/hr: 6	.781
Ictalurus pu	nctatus					
channel catf	ish			Total	Mean	
	1	Number	Length Rang	e Weight	Weight	Disposition
		1	17.05 -0-	1.60	1 600	
			17.03 -0-	1.00	1.600	released
		1	17.44 -0-	1.80	1.800	released released
		1				
		1	17.44 -0-	1.80	1.800	released
		1 1 1	17.44 -0- 17.52 -0-	1.80 1.65	1.800 1.650	released released
	_	1 1 1	17.44 -0- 17.52 -0- 17.80 -0-	1.80 1.65 1.75	1.800 1.650 1.750	released released released
Total	Number:	1 1 1 1	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0-	1.80 1.65 1.75 2.50 3.85	1.800 1.650 1.750 2.500	released released released released released
Notropis ath	erinoide	1 1 1 1 1	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0- 20.87 -0-	1.80 1.65 1.75 2.50 3.85	1.800 1.650 1.750 2.500 3.850	released released released released released
Notropis ath	erinoide	1 1 1 1 1	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0- 20.87 -0-	1.80 1.65 1.75 2.50 3.85	1.800 1.650 1.750 2.500 3.850 Wt/hr:18.	released released released released released
Notropis ath	erinoide er	1 1 1 1 1	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0- 20.87 -0- Number/hr: 8	1.80 1.65 1.75 2.50 3.85 2 Wt:13.15	1.800 1.650 1.750 2.500 3.850	released released released released released
Notropis ath	erinoide er	1 1 1 1 1: 6	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0- 20.87 -0- Number/hr: 8	1.80 1.65 1.75 2.50 3.85 2 Wt:13.15 Total Weight	1.800 1.650 1.750 2.500 3.850 Wt/hr:18.	released released released released released
	erinoide er	1 1 1 1 1 2: 6	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0- 20.87 -0- Number/hr: 8	1.80 1.65 1.75 2.50 3.85 2 Wt:13.15 Total Weight	1.800 1.650 1.750 2.500 3.850 Wt/hr:18	released released released released released released released Disposition preserved
Notropis ath emerald shin Total	erinoide er ! Number:	1 1 1 1 1 2: 6	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0- 20.87 -0- Number/hr: 8 Length Range	1.80 1.65 1.75 2.50 3.85 2 Wt:13.15 Total Weight	1.800 1.650 1.750 2.500 3.850 Wt/hr:18.	released released released released released released Disposition preserved
Notropis ath emerald shin Total	erinoide er ! Number:	1 1 1 1 1 2: 6	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0- 20.87 -0- Number/hr: 8 Length Range	1.80 1.65 1.75 2.50 3.85 2 Wt:13.15 Total Weight	1.800 1.650 1.750 2.500 3.850 Wt/hr:18.	released released released released released released released Disposition preserved
Notropis ath emerald shin Total	erinoide er ! Number:	1 1 1 1 1 2: 6	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0- 20.87 -0- Number/hr: 8 Length Range 1.34 3.15	1.80 1.65 1.75 2.50 3.85 2 Wt:13.15 Total Weight -0- 5 Wt: 0.00 Total	1.800 1.650 1.750 2.500 3.850 Wt/hr:18. Mean Weight -0- Wt/hr: 0.	released released released released released released old Disposition preserved
Notropis ath emerald shin Total	erinoide er ! Number:	1 1 1 1 1 : 6 es Number	17.44 -0- 17.52 -0- 17.80 -0- 19.09 -0- 20.87 -0- Number/hr: 8 Length Range 1.34 3.1!	1.80 1.65 1.75 2.50 3.85 2 Wt:13.15 Total Weight -0- 5 Wt: 0.00 Total	1.800 1.650 1.750 2.500 3.850 Wt/hr:18. Mean Weight -0- Wt/hr: 0.	released released released released released released released Disposition preserved

Number: 1 Number/hr: 1.4 Wt: 0.25 Wt/hr: 0.342

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 57

		ne.					
Aplodinotus		2112					
freshwater	irum	Number	Length	Range	Total Weight	Mean Weight	Disposition
		1	3.54 13.07	-0- -0-	0.02 0.95		released released
Total	Number	: 2	Number/h	r: 2.7	Wt: 0.97	Wt/hr: 1	.329
Lepomis cya	nellus					-	
green sunfis	sh	Number	Length	Range	Total Weight	Mean Weight	Disposition
		3	1.97	3.11	-0-	-0-	released
Total	Number	: 3	Number/h	r: 4.1	Wt: 0.00	Wt/hr: 0	.000
Dorosoma cer		1					
gizzard shad	i	Number	Length	Range	Total Weight	Mean Weight	Disposition
		9 1	2.56 5.91	3.35 -0-	0.10 0.10		released released
Total	Number	: 10	Number/h	r: 13.7	Wt: 0.20	Wt/hr: 0	. 274
Micropterus	salmoid	les					· · · · · · · · · · · · · · · · · · ·
largemouth h					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	3.15	-0-	-0-	-0-	released
Total	Number	: 1	Number/h	r: 1.4	Wt: 0.00	Wt/hr: 0	.000
Dorosoma pet							
threadfin sh	nad	Number	Length	Range	Total Weight	Mean Weight	Disposition
		2	2.99	3.15	-0-	-0-	released
Total	Number	: 2	Number/h	r: 2.7	Wt: 0.00	Wt/hr: 0	.000
	mainna						
Carpiodes cy	pr Thus						
quillback	, pr mus	Number	Length	Range	Total Weight	Mean Weight	Disposition
	prinds	Number 1	Length 4.02	Range		Weight	Disposition
	Number	1		-0-	Weight	Weight	
quillback Total Morone chrys	Number	1	4.02	-0-	Weight 0.03 Wt: 0.03	Weight 0.030 Wt/hr: 0	released
quillback Total	Number	1	4.02 Number/h	-0- r: 1.4	Weight 0.03	Weight 0.030	released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 58

Total Number: 3 Number/hr: 4.1 Wt: 0.12 Wt/hr: 0.164

Total for 1990-21 Number: 41 Number/hr: 56.16 Wt:19.7 Wt/hr:27.01

Ictiobus cy bigmouth bu		Number	Length	Range	Total Weight	Mean Weight	Disposi
		1	13.58	-0-	1.65	1.650	release
		1	16.85	-0-	2.80	2.800	released
		1	18.11	-0-	3.95	3.950	released
Total	Number	: 3	Number/hr	: 3.4	Wt: 8.40	Wt/hr: 9	. 655
Lepomis mac	rochirus	1					
bluegill					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposit
		1	6.38	-0-	0.24	0.240	released
Total	Number	: 1	Number/hr	: 1.1	Wt: 0.24	Wt/hr: 0	.276
Cyprinus ca	rpio						
carp					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposi
		1	18.50	-0-	3.57	3.570	released
		1	19.69	-0-	4.10	4.100	released
		1	20.28	-0-	5.25	5.250	released
		1	20.87	-0-	4.45	4.450	released
Total	Number	: 4	Number/hr	: 4.6	Wt:17.37	Wt/hr:19	. 966
Ictalurus p		1					
channel cat	fish			_	Total	Mean	
		Number	Length	kange	Weight	Weight	Disposit
		1	10.63	-0-	0.37	0.370	released
		ī		-o-	0.96	0.960	released
		1	14.80	-0-	1.15	1.150	released
		1	15.08	-0-	1.20	1.200	released
		1		-0-	1.95	1.950	released
		1	17.91	-0-	2.25	2.250	released
Total	Number	: 6	Number/hr	: 6.9	Wt: 7.88	Wt/hr: 9	.057
Aplodinotus	grunnie	ns					
freshwater					Total	Mean	
		Number	Length 1	Range	Weight	Weight	Disposit
		1	0.37	-0-	0.01	0.010	released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 60

gizzard shad	đ	Numbe	r Length	Range	Total Weight	Mean Weight	Disposition
		1	2.91	3.31	0.04	0.040	released
Total	Number	r: 1	Number/h	r: 1.1	Wt: 0.04	Wt/hr: 0	.046
Lepisosteus		tomus					
shortnose ga	ar	Numbe	r Length	Range	Total Weight	Mean Weight	Disposition
		1	14.76	-0-	3.70	3.700	released
					Wt: 3.70	Wt/hr: 4	253
Total	Number	r: 1	Number/h	r: 1.1	WC: 3.70	#C/III. 4	. 2 3 3
Micropterus	dolomi		Number/h	r: 1.1			
	dolomi				Total Weight	Mean Weight	-
Micropterus	dolomi	eui			Total	Mean	-
Micropterus	dolomi	Numbe	r Length	Range	Total Weight	Mean Weight	Disposition
Micropterus smallmouth l	dolomie bass Numbe	Numbe	r Length	Range	Total Weight 1.30 Wt: 1.30	Mean Weight 1.300 Wt/hr: 1	Disposition
Micropterus smallmouth l	dolomie bass Numbe	Numbe	r Length 14.17 Number/h	Range -0- r: 1.1	Total Weight	Mean Weight 1.300	Disposition
Micropterus smallmouth Total	dolomie bass Numbe	Numbe	r Length 14.17 Number/h	Range -0- r: 1.1	Total Weight 1.30 Wt: 1.30 Total	Mean Weight 1.300 Wt/hr: 1	Disposition released

Total for 1990-22 Number: 20 Number/hr: 22.99 Wt:39.1 Wt/hr:44.92

Collection 1990-23 Crater-Willow Islands River mile 29.2 to 30.8 Collection date: 09/27/90 Run = 0.50 hrs Ictiobus cyprinellus bigmouth buffalo Total Mean Number Length Range Weight Weight Disposition 1 16.14 -0-2.28 2.280 released 1 16.54 -0-2.23 2.230 released Total Number: 2 Number/hr: Wt: 4.51 Wt/hr: 9.020 4.0 Pomoxis nigromaculatus black crappie Total Mean Number Length Range Weight Weight Disposition 1 7.87 0.28 0.280 -0released Total Number: 1 Number/hr: 2.0 Wt: 0.28 Wt/hr: 0.560 Lepomis macrochirus bluegill Total Mean Number Length Range Weight Weight Disposition 3 1.61 1.97 -0--0released 1 2.52 -0--0--0released 1 5.12 -0-0.08 0.080 released Total Number: 5 Number/hr: 10.0 Wt: 0.08 Wt/hr: 0.160 Cyprinus carpio Total carp Mean Number Length Range Weight Weight Disposition 2.000 16.22 -0-2.00 released 1 16.34 -0-2.25 2.250 released 1.80 released 1 16.34 -0-1.800 1 16.73 -0-2.29 2.290 released ī 16.85 -0-1.13 1.130 released 1 17.01 -0-3.00 3.000 released 17.32 -0-2.30 2.300 released ī -0-2.52 17.52 2.520 released 1 17.72 -0-2.50 2.500 released 17.91 -0-2.94 2.940 released Number/hr: 20.0 Wt:22.73 Total Number: 10 Wt/hr:45.460 Ictalurus punctatus channel catfish Total Mean Number Length Range Weight Weight Disposition 1 10.08 -0-0.33 0.330 released ī 10.24 -0-0.31 0.310 released

May 1991	Long				g Summary	aunda	Page A- 62
	Delig	CHS	In Inches	and we	ights in p	ounus	
		1	11.14	-0-	0.44	0.440	released
		1	11.46	-0-	0.49	0.490	released
		1	11.50	-0-	0.44	0.440	released
		1	13.62	-0-	1.74	1.740	released
		1	13.98	-0-	0.84	0.840	released
		1	14.17	-0-	0.91	0.910	released
		1	14.65	-0-	0.95	0.950	released
		1	14.76	-0-	1.00	1.000	released
		1	15.67	-0-	1.20	1.200	released
		1	20.28	-0-	3.25	3.250	released
Total	Number:	12	Number/hr	: 24.0	Wt:11.90	Wt/hr:23	800
Notropis ath							
emerald shir					Total	Mean	
	Nu	mber	Length	Range	Weight	Weight	Disposition
		3	1.46	2.01	-0-	-0-	released
Total	Number:	3	Number/hr	: 6.0	Wt: 0.00	Wt/hr: 0.	.000
Pylodictis o	livaria						
flathead cat					Total	Mean	
		mber	Length	Range	Weight	Weight	Disposition
	_	1	12.20	-0-	0.63	0.630	released
Total	Number:	1	Number/hr	: 2.0	Wt: 0.63	Wt/hr: 1	. 260
Aplodinotus	grunniens						
freshwater d					Total	Mean	
	Nu	mber	Length	Range	Weight	Weight	Disposition
	_						
		3	3.94	4.84	0.09	0.030	released
	_	1	10.63	-0-	0.52	0.520	released
Total	Number:	4	Number/hr	: 8.0	Wt: 0.61	Wt/hr: 1.	. 220
Dorosoma cer	edianum						
gizzard shad					Total	Mean	
	Nu	mber	Length	Range	Weight	Weight	Disposition
		3	2.64	3.35	0.04	0.013	released
		2	2.72	3.19	0.13	0.065	released
		ī		-0-	0.09	0.090	released
Total	Number:	6	Number/hr	: 12.0	Wt: 0.26	Wt/hr: 0.	520
Micropterus	calmoidee						
largemouth h					Total	Mean	
1319CMOUCH L		mber	Length	Range	Weight	Weight	Disposition
		1	11.50	-0-	0.77	0.770	released
		î	14.57	-o-	1.42	1.420	released
Total	Number:	2	Number/hr	: 4.0	Wt: 2.19	Wt/hr: 4.	380

Mav 1991		

Total

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 63

Hiodon tergi mooneye		Number	: Length	Range	Total Weight	Mean Weight	Disposition
	-	1	12.40	-0-	0.64	0.640	released
Total	Number	: 1	Number/h	r: 2.0	Wt: 0.64	Wt/hr: 1	.280
Lepomis humi orangespotte		a b			Total	Mean	
orangespocce		sn Number	Length	Range	Weight	Weight	Dispositio
	_	1	1.81	-0-	-0-	-0-	released
		1	3.43	-0- -0-	0.04	0.040	released released
	_	1	3.58	-0-	0.03	0.030	released
Total	Number	: 3	Number/h	r: 6.0	Wt: 0.07	Wt/hr: 0	.140
			Number/h	r: 6.0	Wt: 0.07	Wt/hr: 0	.140
Total Moxostoma ma shorthead re	crolepi		Number/h	r: 6.0	Wt: 0.07	Wt/hr: 0	.140
Moxostoma ma	crolepio					<u> </u>	
Moxostoma ma	crolepio	dotum			Total	Mean	Disposition released
Moxostoma ma	crolepio	dotum Number	Length	Range	Total Weight	Mean Weight	Disposition
Moxostoma ma shorthead re Total	crolepic dhorse !	dotum Number	Length 15.16	Range	Total Weight 1.23 Wt: 1.23	Mean Weight 1.230 Wt/hr: 2	Disposition released
Moxostoma ma shorthead re Total	crolepic dhorse	dotum Number 1	Length 15.16 Number/h	Range -0- r: 2.0	Total Weight 1.23 Wt: 1.23	Mean Weight 1.230 Wt/hr: 2	Dispositio released
Moxostoma ma shorthead re Total	crolepic dhorse	dotum Number	Length 15.16 Number/h	Range -0- r: 2.0	Total Weight 1.23 Wt: 1.23	Mean Weight 1.230 Wt/hr: 2	Disposition released
Moxostoma ma shorthead re Total	crolepic dhorse	dotum Number 1	Length 15.16 Number/h	Range -0- r: 2.0	Total Weight 1.23 Wt: 1.23	Mean Weight 1.230 Wt/hr: 2 Mean Weight 0.040	Disposition released .460 Disposition released
Moxostoma ma shorthead re Total	crolepic dhorse	dotum Number 1 : 1 Number	Length 15.16 Number/h Length 4.02 4.33	Range -0- r: 2.0 Range -0-	Total Weight 1.23 Wt: 1.23 Total Weight 0.04 0.04	Mean Weight 1.230 Wt/hr: 2 Mean Weight 0.040 0.040	Disposition released Disposition released released
Moxostoma ma shorthead re Total	crolepic dhorse	dotum Number 1 : 1 Number 1 1 1	Length 15.16 Number/h Length 4.02 4.03 10.94	Range -0- r: 2.0 Range -0- -0-	Total Weight 1.23 Wt: 1.23 Total Weight 0.04 0.63	Mean Weight 1.230 Wt/hr: 2 Mean Weight 0.040 0.040 0.630	Disposition released .460 Disposition released
Moxostoma ma shorthead re Total	crolepic dhorse	dotum Number 1 : 1 Number	Length 15.16 Number/h Length 4.02 4.33	Range -0- r: 2.0 Range -0-	Total Weight 1.23 Wt: 1.23 Total Weight 0.04 0.04	Mean Weight 1.230 Wt/hr: 2 Mean Weight 0.040 0.040	Disposition released Disposition released released

Number: 6 Number/hr: 12.0 Wt: 3.37 Wt/hr: 6.740

Total for 1990-23 Number: 57 Number/hr:114.00 Wt:48.5 Wt/hr:97.00

1990 Electrofishing Summary Lengths in inches and weights in pounds

Ictiobus cy	orinally					
biqmouth bu		18		Total	Mean	
		Number	Length Rang	e Weight	Weight	Disposi
		1	15.98 -0-	2.50	2.500	release
		1	17.01 -0-	2.80	2.800	release
Total	Number	: 2 N	umber/hr: 2	.1 Wt: 5.30	Wt/hr: 5	464
Pomoxis nig		tus				
black crapp:				Total	Mean	
		Number	Length Rang	e Weight	Weight	Disposi
		1	6.30 -0-	0.13	0.130	release
		ī	6.85 -0-	0.18	0.180	release
		ī	6.89 -0-	0.18	0.180	release
		1	6.97 -0-	0.17	0.170	release
		1	7.24 -0-	0.22	0.220	release
		1	7.32 -0-	0.22	0.220	release
		1	8.35 -0-	0.37	0.370	release
		1	8.82 -0-	0.40	0.400	release
Total	Number	: 8 N	umber/hr: 8	.2 Wt: 1.87	Wt/hr: 1.	.928
Lepomis mac	rochirus					
bluegill				Total	Mean	
		Number	Length Rang	e Weight	Weight	Disposi
		1	1.46 -0-	-0-	-0-	release
		ī	3.39 -0-	0.02	0.020	
					0.020 0.040	
		1	3.39 -0-	3 0.20		release
		1 5	3.39 -0- 3.46 4.3	3 0.20 9 0.32	0.040 0.107 0.187	release release release
		1 5 3	3.39 -0- 3.46 4.3 5.12 5.3	3 0.20 9 0.32	0.040 0.107	release release release
Total	Number	1 5 3 3	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4	3 0.20 9 0.32 6 0.56 0.22	0.040 0.107 0.187	release release release release
Cyprinus car		1 5 3 3	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0-	3 0.20 9 0.32 6 0.56 0.22	0.040 0.107 0.187 0.220 Wt/hr: 1.	release release release release
		1 5 3 3 1	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0- umber/hr: 14	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32	0.040 0.107 0.187 0.220 Wt/hr: 1.	release release release release
Cyprinus car		1 5 3 3	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0-	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32	0.040 0.107 0.187 0.220 Wt/hr: 1.	release release release release
Cyprinus car		1 5 3 3 1	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0- umber/hr: 14	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32 Total weight 0.48	0.040 0.107 0.187 0.220 Wt/hr: 1. Mean weight 0.480	release release release release 361 Disposi
Cyprinus car		1 5 3 3 1 1	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0- umber/hr: 14 Length Rang 9.76 -0- 15.83 -0-	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32 Total weight 0.48 2.20	0.040 0.107 0.187 0.220 Wt/hr: 1. Mean Weight 0.480 2.200	release release release release release release release
Cyprinus car		1 5 3 3 1 1	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0- umber/hr: 14 Length Rang 9.76 -0-	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32 Total weight 0.48	0.040 0.107 0.187 0.220 Wt/hr: 1. Mean Weight 0.480 2.200 1.980	release release release release 361 Disposi release release
Cyprinus car		1 5 3 3 1 1	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0- umber/hr: 14 Length Rang 9.76 -0- 15.83 -0-	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32 Total weight 0.48 2.20	0.040 0.107 0.187 0.220 Wt/hr: 1. Mean Weight 0.480 2.200	release release release release 361 Disposi release release
Cyprinus car		1 5 3 3 1 1	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0- umber/hr: 14 Length Rang 9.76 -0- 15.83 -0- 15.91 -0-	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32 Total Weight 0.48 2.20 1.98	0.040 0.107 0.187 0.220 Wt/hr: 1. Mean Weight 0.480 2.200 1.980	release release release release release release release release
Cyprinus car		1 5 3 3 1 2: 14 N Number 1 1 1 1 1	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0- umber/hr: 14 Length Rang 9.76 -0- 15.93 -0- 15.91 -0- 16.10 -0- 16.10 -0-	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32 Total Weight 0.48 2.20 1.98	0.040 0.107 0.187 0.220 Wt/hr: 1. Mean Weight 0.480 2.200 1.980 1.920 2.040 2.170	Disposi release
Cyprinus car		1 5 3 3 1 1 :: 14 N	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0- umber/hr: 14 Length Rang 9.76 -0- 15.83 -0- 15.83 -0- 15.91 -0- 15.91 -0- 16.10 -0-	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32 Total Weight 0.48 2.20 1.98 1.92 2.04	0.040 0.107 0.187 0.220 Wt/hr: 1. Mean Weight 0.480 2.200 1.980 1.920 2.040	Disposi release
Cyprinus car		1 5 3 3 1 1	3.39 -0- 3.46 4.3 5.12 5.3 5.75 6.4 6.50 -0- umber/hr: 14 Length Rang 9.76 -0- 15.91 -0- 15.91 -0- 16.10 -0- 16.10 -0-	3 0.20 9 0.32 6 0.56 0.22 .4 Wt: 1.32 Total Weight 0.48 2.20 1.98 1.92 2.04 2.17	0.040 0.107 0.187 0.220 Wt/hr: 1. Mean Weight 0.480 2.200 1.980 1.920 2.040 2.170	release releas

ay 1991		199	90 Elect	rofishir	ng Summary		Page A- 65
-	Lei	ngths :	in inche	s and we	ights in p	ounds	
		1	17.80	-0-	3.15	3.150	released
		1	17.95	-0-	2.49	2.490	released
		1	18.11	-0-	2.68	2.680	released
		1	18.31	-0-	3.50	3.500	released
		1	18.50	-0-	2.95	2.950	released
		1	19.37	-0-	4.14	4.140	released
Total	Number	15	Number/h	r: 15.5	Wt:37.16	Wt/hr:38	.309
Ictalurus pu					Total	Mean	
channel cat		Number	Length	Range	Weight	Weight	Dispositio
		1	9.65	-0-	0.28	0.280	released
			10.43	-0-	1.35	1.350	released
		1	11.81	-0-	0.51	0.510	released
			12.24	-0-	0.62	0.620	released
		1	12.32	-0-	0.54	0.540	released
		1	12.99	-0-	0.65	0.650	released
		1	16.22	-0-	1.22	1.220 2.170	released released
			17.24	-0-	2.17	2.170	released
Total	Number	8 1	Number/h	r: 8.2	Wt: 7.34	Wt/hr: 7	.567
Notropis atl	herinoid	8					
emerald ship	ner				Total	Mean	
	1	Number	Length	Range	Weight	Weight	Disposition
	-	1	1.97	-0-	-0-	-0-	released
Total	Number	: 1	Number/h	r: 1.0	Wt: 0.00	Wt/hr: 0	.000
Pylodictis o	olivaris						
flathead car	tfish				Total	Mean	
	1	Number	Length	Range	Weight	Weight	Disposition
	_	1	13.86	-0-	0.90	0.900	released
		1	26.77	-0-	9.00	9.000	released
Total	Number	2 1	Number/h	r: 2.1	Wt: 9.90	Wt/hr:10	.206
Aplodinotus		ns					
freshwater o					Total	Mean	
	1	Number	Length	Range	Weight	Weight	Disposition
	-	1	5.00	-0-	0.03	0.030	released
		1	7.20	-0-	0.15	0.150	released
		ī	7.40	-0-	0.17	0.170	released
		ī	7.60	-0-	0.20	0.200	released
		ī	12.05	-0-	0.80	0.800	released
Total	Number	: 5 1	Number/h	r: 5.2	Wt: 1.35	Wt/hr: 1	. 392
Dorosoma ce	pedianum						
gizzard sha					Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition

ay 1991	Len				g Summary ights in p	ounds	Page A- 66
		46	2.48	3.19	0.46	0.010	released
		17	3.19	3.94	0.28	0.016	released
	_	1	6.50	-0-	0.08	0.080	released
Total	Number:	64 N	umber/h	r: 66.0	Wt: 0.82	Wt/hr: 0	.845
Micropterus		s				_	
largemouth 1					Total	Mean	
	И	umber	Length	Range	Weight	Weight	Dispositio
		1	9.41	-0-	0.45	0.450	released
		1	11.69	-0-	0.88	0.880	released
		1	12.83	-0-	1.24	1.240	released
		1	17.13	-0-	2.95	2.950	released
Total	Number:	4 N	umber/h	r: 4.1	Wt: 5.52	Wt/hr: 5	.691
Morone chrys	sops				m 3		
white bass	N	umber	Length	Range	Total Weight	Mean Weight	Dispositio
	_	1	6.34	-0-	0.09	0.090	released
		1	10.43	-0-	0.56	0.560	released
		1	13.46	-0-	1.16	1.160	released
		1	14.29	-0-	1.49	1.490	released
Total	Number:	4 N	umber/h	r: 4.1	Wt: 3.30	Wt/hr: 3	.402

Total for 1990-24 Number:127 Number/hr:130.93 Wt:73.9 Wt/hr:76.16

Pomoxis nigi black crapp:	ie	us umber	Length Range	Total Weight	Mean Weight	Disposi
	_	1	9.65 -0-	0.51	0.510	release
Total	Number:	1	Number/hr: 1.	0 Wt: 0.51	Wt/hr: 0	.510
Lepomis mac	rochirus					
bluegill				Total	Mean	
	N	umber	Length Range	Weight	Weight	Disposi
	_	3	1.50 1.97	-0-	-0-	release
		ĭ	3.46 -0-	0.02	0.020	release
		i	4.33 -0-	0.05	0.050	release
		ī	5.59 -0-	0.13	0.130	release
Total	Number:	6	Number/hr: 6.	0 Wt: 0.20	Wt/hr: 0	.200
Cyprinus can	mio					
carp	. P.10			Total	Mean	
ourp	N	umber	Length Range		Weight	Disposi
		1	12.13 -0-	0.85	0.850	release
		ī	13.58 -0-	1.11	1.110	release
		1	14.92 -0-	1.50	1.500	release
		1	16.06 -0-	2.02	2.020	release
		1	16.18 -0-	1.87	1.870	release
		1	16.22 -0-	1.88	1.880	release
		1	16.26 -0-	2.14	2.140	release
		1	16.30 -0-	2.19	2.190	release
		1	16.30 -0-	2.05	2.050	release
		1	16.34 -0-	2.22	2.220	release
		1	16.85 -0-	2.43	2.430	release
		1	17.60 -0-	2.52	2.520	release
		1	17.64 -0-	2.61	2.610	release
		1	17.80 -0-	2.81	2.810	release
		1	17.80 -0-	3.06	3.060	release
		1	17.80 -0-	2.40	2.400	release
		1	17.83 -0-	2.71	2.710	release
		1	18.90 -0-	3.00	3.000	release
		1	19.09 -0-	3.56	3.560	release
		1	21.06 -0-	4.23	4.230	release
Total	Number:	20	Number/hr: 20.	0 Wt:47.16	Wt/hr:47	

1 9.57 -0-	May 1991	Len	19 yths	90 Elect: in inches	rofishin s and we	g Su ight	mmary s in p	ounds	Page A- 68
1			1	9.57	-0-		0.26	0.260	released
1									
1									
1									
1									
1 12.60 0 0.58 0.580 released 1 12.76 0-0 0.62 0.623 0.670 released 1 12.99 0 0.67 0.670 released 1 13.38 0 0.73 0.730 released 1 13.78 0 0.73 0.730 released 1 13.78 0 0.83 0.830 released 1 14.80 0 1.02 1.022 1.022 released 1 15.35 0 1.21 1.210 released 1 16.22 0 1.30 1.300 released 1 16.73 0 1.74 1.740 released 1 16.73 0 1.74 1.740 released 1 16.73 0 1.74 1.740 released 1 2.09 0 0 0 preserved 1 2.09 0 0 0 preserved 1 2.09 0 0 0 0 preserved 1 2.09 0-			1						
1 12.76 -0- 0.62 0.620 released 1 12.91 -0- 0.67 0.670 released 1 12.99 -0- 0.67 0.670 released 1 12.99 -0- 0.67 0.670 released 1 13.39 -0- 0.75 0.750 released 1 13.58 -0- 0.75 0.750 released 1 13.58 -0- 0.75 0.750 released 1 13.78 -0- 0.83 0.830 released 1 14.80 -0- 1.02 1.020 released 1 15.35 -0- 1.21 1.210 released 1 16.22 -0- 1.30 1.300 released 1 16.22 -0- 1.74 1.740 released 1 16.73 -0- 1.74 1.740 released 1 16.73 -0- 1.74 1.740 released 1 2.09 -0- 0.75 0.750 released 1 2.09 0.190 released 1 2.09 0.000 0.000 0.000 released 0.0000 0.000 0.000 0.000 0.000									
1 12.91 -0- 0.67 0.670 released 1 12.99 -0- 0.67 0.670 released 1 13.39 -0- 0.670 released 1 13.46 -0- 0.73 0.730 released 1 13.78 -0- 0.83 0.830 released 1 13.78 -0- 0.83 0.830 released 1 14.80 -0- 1.02 1.020 released 1 15.35 -0- 1.21 1.210 released 1 16.73 -0- 1.74 1.740 released 1 12.09 -0- 1.74 1.740 released 1 1.09 released released									
1 12.99 -0- 0.67 0.670 released 1 13.39 -0- 0.76 0.760 released 1 13.46 -0- 0.73 0.730 released 1 13.58 -0- 0.75 0.750 released 1 13.58 -0- 0.75 0.750 released 1 13.78 -0- 0.83 0.830 released 1 14.80 -0- 1.02 1.020 released 1 16.35 -0- 1.21 1.210 released 1 16.22 -0- 1.30 1.300 released 1 16.73 -0- 1.74 1.740 released									
1 13.39 -0- 0.76 0.760 released 1 13.46 -0- 0.73 0.730 released 1 13.58 -0- 0.75 0.750 released 1 13.78 -0- 0.83 0.830 released 1 13.78 -0- 0.83 0.830 released 1 14.80 -0- 1.02 1.020 released 1 15.35 -0- 1.21 1.210 released 1 16.22 -0- 1.30 1.300 released 1 16.73 -0- 1.74 1.740 released 1 2.09 -0- 1.00 1.000 released 1 2.09 -00- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0									
1 13.46 -0- 0.73 0.730 released 1 13.58 -0- 0.75 0.750 released 1 13.78 -0- 0.83 0.830 released 1 13.78 -0- 0.83 0.830 released 1 14.80 -0- 1.02 1.020 released 1 15.35 -0- 1.21 1.210 released 1 16.22 -0- 1.30 1.300 released 1 16.22 -0- 1.30 1.300 released 1 16.73 -0- 1.74 1.740 released Total Number: 18 Number/hr: 18.0 Wt:13.75 Wt/hr:13.750 Notropis atherinoides emerald shiner									
1 13.58 -0- 0.75 0.750 released 1 13.78 -0- 0.83 0.830 released 1 13.78 -0- 0.83 0.830 released 1 14.80 -0- 1.02 1.020 released 1 15.35 -0- 1.21 1.210 released 1 15.35 -0- 1.21 1.210 released 1 16.73 -0- 1.74 1.740 released Total Number: 18 Number/hr: 18.0 Wt:13.75 Wt/hr:13.750 Notropis atherinoides Number Length Range Meight Meight									
1 13.78 -0- 0.83 0.830 released 1 14.80 -0- 1.02 1.020 released 1 14.80 -0- 1.02 1.020 released 1 15.35 -0- 1.21 1.210 released 1 16.73 -0- 1.74 1.740 released released									
1 14.80 -0- 1.02 1.020 released 1 15.35 -0- 1.21 1.210 released 1 16.22 -0- 1.30 1.300 released 1 16.73 -0- 1.74 1.740 released 1 16.73 -0- 1.74 1.740 released									
1 15.35 - 0- 1.21 1.210 released 1 16.22 - 0- 1.30 1.300 released 1 16.73 - 0- 1.74 1.740 released 1 16.73 - 0- 1.74 1.740 released 1.75									
1 16.22 -0- 1.30 1.300 released 1.740 released 1.74									
Total Number 18 Number/hr: 18.0 Wt:13.75 Wt/hr:13.750									
Notropis atherinoides									
Notropis atherinoides									
Number Length Range	Total	Number:	18	Number/h	r: 18.0	Wt:	13.75	Wt/hr:13	.750
Number Length Range Weight Weight Disposition			3			_	- 4 - 3		
Total Number: 3 Number/hr: 3.0 Wt: 0.00 Wt/hr: 0.000	emerald shir		umber	Length	Range				Disposition
Total Number: 3 Number/hr: 3.0 Wt: 0.00 Wt/hr: 0.000		_		2.01	2.20	_	-0-	-0-	preserved
Pylodictis olivaris flathead catfish		_	1	2.09	-0-		-0-	-0-	released
Number Length Range Total Mean Weight Disposition	Total	Number:	3	Number/h	r: 3.0	Wt:	0.00	Wt/hr: 0	.000
Number Length Range Weight Weight Disposition									
Total Number: 1 Number/hr: 1.0 Wt: 0.19 Wt/hr: 0.190	flathead cat				_				
Total Number: 1 Number/hr: 1.0 Wt: 0.19 Wt/hr: 0.190		Nt	ımber	Length	Range	We	eight	Weight	Disposition
Aplodinotus grunniens freshwater drum Number Length Range Total Weight Disposition			1		-0-				
Number Length Range Weight Weight Weight Disposition				8.35	-0-		0.19	0.190	released
Number Length Range Weight Weight Disposition	Total	Number:				Wt:			
2 3.31 3.74 0.03 0.015 released 3 4.21 4.72 0.08 0.027 released 1 9.76 -0- 0.46 0.460 released 1 11.18 -0- 0.70 0.70 0.700 released			1			Wt:			
3 4.21 4.72 0.08 0.027 released 1 9.76 -0- 0.46 0.460 released 1 11.18 -0- 0.70 0.700 released	Aplodinotus	grunniens	1				0.19	Wt/hr: 0	
1 9.76 -O-	Aplodinotus	grunniens	1	Number/hi	r: 1.0	To	0.19	Wt/hr: 0	.190
1 11.18 -0- 0.70 0.700 released	Aplodinotus	grunniens	1 imber	Number/hi	Range 3.74	To	0.19 otal eight	Wt/hr: 0 Mean Weight 0.015	Disposition released
Total Number: 7 Number/hr: 7.0 Wt: 1.27 Wt/hr: 1.270	Aplodinotus	grunniens	1 umber 2 3	Length 3.31 4.21	Range 3.74 4.72	To	0.19 otal eight 0.03 0.08	Wt/hr: 0 Mean Weight 0.015 0.027	Disposition released released
Dorosoma cepedianum gizzard shad Number Length Range Total Mean Weight Disposition	Aplodinotus	grunniens	1 Imber 2 3	Length 3.31 4.21 9.76	Range 3.74 4.72	To	0.19 otal eight 0.03 0.08 0.46	Wt/hr: 0 Mean Weight 0.015 0.027 0.460	Disposition released released released
Number Length Range Total Mean Weight Disposition	Aplodinotus	grunniens	1 Imber 2 3	Length 3.31 4.21 9.76	Range 3.74 4.72	To	0.19 otal eight 0.03 0.08 0.46	Wt/hr: 0 Mean Weight 0.015 0.027 0.460	Disposition released released released
Number Length Range Total Mean Weight Disposition	Aplodinotus freshwater d	grunniens Irum N	1 nmber 2 3 1	Length 3.31 4.21 9.76 11.18	Range 3.74 4.72 -0-	To We	0.19 otal eight 0.03 0.08 0.46 0.70	Mean Weight 0.015 0.027 0.460 0.700	Disposition released released released released
Number Length Range Weight Weight Disposition 4 3.31 4.02 0.06 0.015 released 6 5.47 6.97 0.55 0.092 released	Aplodinotus freshwater o	grunniens irum Nu	1 nmber 2 3 1	Length 3.31 4.21 9.76 11.18	Range 3.74 4.72 -0-	To We	0.19 otal eight 0.03 0.08 0.46 0.70	Mean Weight 0.015 0.027 0.460 0.700	Disposition released released released released
6 5.47 6.97 0.55 0.092 released	Aplodinotus freshwater of Total	grunniens Irum Nu Nu Number:	1 nmber 2 3 1	Length 3.31 4.21 9.76 11.18	Range 3.74 4.72 -0-	To We	0.19 otal eight 0.03 0.08 0.46 0.70 1.27	Wt/hr: 0 Mean Weight 0.015 0.027 0.460 0.700 Wt/hr: 1	Disposition released released released released
	Aplodinotus freshwater of Total	grunniens irum Nu- Number:	1 mber 2 3 1 1 7	Length 3.31 4.21 9.76 11.18 Number/h	Range 3.74 4.72 -00- r: 7.0	To We	0.19 otal eight 0.03 0.08 0.46 0.70 1.27	Mt/hr: 0 Mean Weight 0.015 0.027 0.460 0.700 Wt/hr: 1 Mean	Disposition released released released released
	Aplodinotus freshwater of Total	grunniens irum Nu- Number:	1 s s s s s s s s s s s s s s s s s s s	Length 3.31 4.21 9.76 11.18 Number/hi	Range 3.74 4.72 -00- r: 7.0	To We	0.19 otal eight 0.03 0.08 0.46 0.70 1.27	Wt/hr: 0 Mean Weight 0.015 0.027 0.460 0.700 Wt/hr: 1 Mean Weight	Disposition released released released released released
	Aplodinotus freshwater of Total	grunniens irum Nu- Number:	1 mber 2 3 1 1 7	Length 3.31 4.21 9.76 11.18 Number/hi Length 3.31	Range 3.74 4.72 -00- r: 7.0 Range 4.02 6.97	To We	0.19 otal eight 0.03 0.08 0.46 0.70 1.27 otal eight 0.06	Wt/hr: 0 Mean Weight 0.015 0.027 0.460 0.700 Wt/hr: 1 Mean Weight 0.015	Disposition released released released released released released

Total	Number	: 12	Number/hr:	12.0	Wt: 0.92	Wt/hr: 0	.920
Micropterus largemouth b	ass				Total	Mean	
		Number	Length Ra	ngė	Weight	Weight	Disposition
		1	2.83 -0 7.28 -0		-0- 0.20	-0- 0.200	released released
Total	Number	: 2	Number/hr:	2.0	Wt: 0.20	Wt/hr: 0.	. 200
Hybopsis sto	reriana						
silver chub		Number	Length Ra	inge	Total Weight	Mean Weight	Disposition
	,	1	2.32 -0)-	-0-	-0-	released
Total	Number	: 1	Number/hr:	1.0	Wt: 0.00	Wt/hr: 0.	.000
Dorosoma pet							
threadfin sh		Numbe	r Length Ra	inge	Total Weight	Mean Weight	Disposition
	,	2 2		3.43	-0- 0.01	-0- 0.005	preserved released
Total	Number	: 4	Number/hr:	4.0	Wt: 0.01	Wt/hr: 0.	.010
Carpiodes cy	prinus						
quillback		Number	Length Ra	inge	Total Weight	Mean Weight	Disposition
	•	1	8.62 -0)-	0.34	0.340	released
Total	Number	: 1	Number/hr:	1.0	Wt: 0.34	Wt/hr: 0.	340
Morone chrys	орв						
white bass		Number	Length Ra	inge	Total Weight	Mean Weight	Disposition
		2		.06	0.04	0.020	released
		1	12.40 -0 12.76 -0		0.86 0.97	0.860 0.970	released released
		i	12.83 -0		1.07	1.070	released
Total	Number	: 5	Number/hr:	5.0	Wt: 2.94	Wt/hr: 2.	940

Total for 1990-25 Number: 81 Number/hr: 81.00 Wt:67.5 Wt/hr:67.49

Disposition

Pomoxis nigrom	aculat	tus						
black crappie	1	Number	Length	Range		otal Weight	Mean Weight	Dispositio
		1	7.91	-0-		0.32	0.320	released
		1	9.21	-0-		0.46	0.460	released
		1	9.76	-0-		0.52	0.520	released
		1	10.12	-0-		0.66	0.660	released
		1	10.20	-0-		0.74	0.740	released
		1	10.43	-0-		0.72	0.720	released
Total N	umber	: 6	Number/h	r: 6.0	Wt:	3.42	Wt/hr: 3	.420
Cyprinus carpi	0							
carp						otal	Mean	
	1	Number	Length	Range	<u> </u>	leight	Weight	Dispositio
		1	9.57	-0-		0.49	0.490	released
		1	10.04	-0-		0.58	0.580	released
		1	13.98	-0-		1.30	1.300	released
		1	14.37	-0-		1.73	1.730	released
		1	14.45	-0-		1.45	1.450	released
		1	17.72	-0-		3.05	3.050	released
		1	17.91	-0-		2.61	2.610	released
		1	18.31	-0-		2.75	2.750	released
		1	18.43	-0-		2.90	2.900	released
		1	18.54	-0-		3.12	3.120	released
		1	22.44	-0-		5.00	5.000	released
Total N	umber	11	Number/h	r: 11.0	Wt:	24.98	Wt/hr:24	.980
Ictalurus punc								
channel catfis						otal	Mean	
	1	lumber	Length	Range	W	eight	Weight	Dispositio
		1	8.07	-0-		0.17	0.170	released
		1	8.86	-0-		0.18	0.180	released
		1	9.25	-0-		0.24	0.240	released
		1	9.92	-0-		0.27	0.270	released
		1	12.28	-0-		0.55	0.550	released
		1	12.99	-0-		0.61	0.610	released
		1	16.54	-0-		1.10	1.100	released
	_	1	19.88	-0-		2.65	2.650	released

Number Length Range

Weight

Weight

1990 Electrofishing Summary Lengths in inches and weights in pounds

12.48 -0-0.880 1 0.88 released 1 16.18 -0-2.18 2.180 released

Page A- 71

2 Total Number: Number/hr: 2.0 Wt: 3.06 Wt/hr: 3.060 Dorosoma cepedianum gizzard shad Total Mean Weight Number Length Range Weight Disposition 11 2.60 2.95 0.11 0.010 released 44 2.72 0.014 released 3.23 0.60 0.30 0.013 23 2.76 3.50 released 96 2.99 3.66 1.50 0.016 released 94 3.23 3.94 1.52 0.016 released 14 3.39 3.74 0.23 0.016 released 31 3.54 3.94 0.64 0.021 released 14 3.58 4.09 0.25 0.018 released 3.70 0.14 7 4.37 0.020 released 37 3.74 4.76 0.92 0.025 released 21 4.02 5.67 0.65 0.031 released 7 4.09 4.88 0.21 0.030 released 2 5.51 5.51 0.12 0.060 released 0.050 1 6.10 -0-0.05 released 3 6.85 7.48 0.40 0.133 released 1 6.97 -0-0.10 0.100 released 2 9.21 9.53 0.58 0.290 released

Total Number: 408 Number/hr:408.0 Wt: 8.32 Wt/hr: 8.320

Micropterus salmoides largemouth bass

Number	Length Range	Weight	Weight	Disposition
1	7.95 -0-	0.27	0.270	released
1	11.02 -0-	0.63	0.630	released
1	11.30 -0-	0.82	0.820	released
1	12.09 -0-	0.98	0.980	released
1	13.54 -0-	1.35	1.350	released
1	14.37 -0-	1.56	1.560	released

Total Number: Number/hr: 6.0 Wt: 5.61 Wt/hr: 5.610

Not s

Notropis hudsonius spotail shiner	Number	Length	Range	Total Weight	Mean Weight	Disposition
	1	1.34	-0-	-0-	-0-	released

Total Number: Number/hr: 1.0 Wt: 0.00 Wt/hr: 0.000

Carpiodes cyprinus quillback

Number	Length Range	Total Weight	Mean Weight	Disposition
1	9.92 -0-	0.50	0.500	released
1	9.96 -0-	0.46	0.460	released

1990 Electrofishing Summary Lengths in inches and weights in pounds

Page A- 72

Total	Number	: 2	Number/hi	r: 2.0	Wt: 0.96	Wt/hr: 0	.960
Morone chry white bass	sops	Number	: Length	Rangė	Total Weight	Mean Weight	Disposition
		1	5.71	-0-	0.12	0.120	released
		i	6.69	-0-	0.12	0.110	released
Total	Number	: 2	Number/h	r: 2.0	Wt: 0.23	Wt/hr: 0	.230
Pomoxis ann	ularis						
white crapp:	ie				Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	9.45	-0-	0.46	0.460	released
		1	9.69	-0-	0.51	0.510	released
		1	10.24	-0-	0.65	0.650	released
		1	10.63	-0-	0.66	0.660	released
		1	10.87	-0-	0.68	0.680	released
		1	10.94	-0-	0.75	0.750	released
		1 1 1	10.98	-0-	0.78	0.780	released
		1	11.26	-0-	0.80	0.800	released
		1	11.73	-0-	0.83	0.830	released
			11.77	-0-	0.91	0.910	released
		1	12.80	-0-	1.31	1.310	released
Total	Number	: 11	Number/h	r: 11.0	Wt: 8.34	Wt/hr: 8	.340

Total for 1990-26 Number:457 Number/hr:457.00 Wt:60.7 Wt/hr:60.69

Collection 19	90-27	Dark Chute	8			
River mile	24.4 to	25.5	Collection	date:	09/28/90	Run = 1.04 hrs

Ictiobus cyp		ıs					
bigmouth buf	falo	Number	Length	Rance	Total Weight	Mean Weight	Dispositio
		- Indumber	Deligen	Kange		Height	DIBPOSICIO
		1	15.83	-0-	2.22	2.220	released
		1	16.14	-0-	2.40	2.400	released
		1	16.73	-0-	2.73	2.730	released
		1	17.64	-0-	3.14	3.140	released
		1	19.09	-0-	4.02	4.020	released
Total	Number	r: 5 N	umber/h	r: 4.8	Wt:14.51	Wt/hr:13	.952
Pomoxis nigr		tus					
black crappi	e				Total	Mean	
		Number	Length	Range	Weight	Weight	Dispositio
		1	6.73	-0-	0.17	0.170	released
		1	7.52	-0-	0.20	0.200	released
		1	7.52	-0-	0.25	0.250	released
		1	8.19	-0-	0.26	0.260	released
		1	9.06	-0-	0.48	0.480	released
		1	11.02	-0-	0.76	0.760	released
		1	11.54	-0-	0.87	0.870	released
Total	Number	: 7 N	lumber/h	r: 6.7	Wt: 2.99	Wt/hr: 2	.875
Lepomis macr	ochirus						
bluegill		Number	Length	Range	Total Weight	Mean Weight	Disposition
		1	1.54	-0-	-0-	-0-	released
		6	1.69	2.17	0.02	0.003	released
		4	2.68	3.43	0.09	0.023	released
		5	4.06	4.33	0.23	0.046	released
		2	4.92	4.96	0.16	0.080	released
		2	5.08 5.98	5.75 7.09	0.23	0.115 0.210	released released
Total	Number		umber/h		Wt: 1.15	Wt/hr: 1	_
			umber/n	21.2	WC: 1.15	wc/nr: 1.	
Cyprinus car carp	p10				Total	Mean	
		Number	Length	Range	Weight	Weight	Disposition
		1	14.61	-0-	1.40	1.400	released
		1	14.72	-0-	1.40	1.400	released
		1	15.24	-0-	1.76	1.760	released
		ī		-0-			released
			15.24 15.91	-0-	2.58	2.580	

y 1991		0 Electrofish			Page A- 74
	Lengths i	n inches and	weights in p	ounds	
	1	16.61 -0-	2.13	2.130	released
	ī	16.65 -0-	2.30	2.300	released
	1	16.65 -0-	1.90	1.900	released
	ī	16.93 -0-	2.21	2.210	released
	ī	17.01 -0-	2.14	2.140	released
	ī	17.13 -0-	2.60	2.600	released
	ī	17.17 -0-	2.21	2.210	released
	ī	17.17 -0-	2.54	2.540	released
	ī	17.52 -0-	2.46	2.460	released
	ī	17.60 -0-	2.56	2.560	released
	ī	18.07 -0-	2.98	2.980	released
	ī	18.27 -0-	2.65	2.650	released
	ī	19.37 -0-	3.72	3.720	released
		13.37 -0-	3.72	3.720	10100000
Total Numb	er: 19 N	umber/hr: 18.	3 Wt:43.37	Wt/hr:41	.702
Ictalurus punctat	us				
channel catfish			Total	Mean	
	Number	Length Range	Weight	Weight	Disposition
	1	11.93 -0-	0.54	0.540	released
	ī	12.76 -0-	0.64	0.640	released
	ī	12.80 -0-	0.84	0.840	released
	ī	13.31 -0-	0.68	0.680	released
	i	13.43 -0-	0.77	0.770	released
	i		0.77	0.900	released
					released
	1	14.45 -0-	0.97	0.970	
	1	15.31 -0-	1.07	1.070	released
	1	17.32 -0-	1.67	1.670	released
	_ 1	19.13 -0-	2.80	2.800	released
Total Numb	er: 10 N	umber/hr: 9.	6 Wt:10.88	Wt/hr:10	.462
Aplodinotus grunn	iens				
freshwater drum			Total	Mean	
	Number	Length Range	Weight	Weight	Disposition
	1	3.74 -0-	0.02	0.020	released
	2	7.28 7.36	0.33	0.165	released
	í	8.46 -0-	0.23	0.230	released
		8.46 -0-	0.23	0.230	Telegren
Total Numb	er: 4 N	umber/hr: 3.	8 Wt: 0.58	Wt/hr: 0	.558
Lepomis cyanellus					
green sunfish			Total	Mean	
	Number	Length Range	Weight	Weight	Disposition
	1	6.73 -0-	0.17	0.170	released
Total Numb	er: 1 N	umber/hr: 1.	0 Wt: 0.17	Wt/hr: 0	.163
Dorosoma cepedian	um				
gizzard shad			Total	Mean	
	Number	Length Range	Weight	Weight	Disposition
	1	3.39 -0-	-0-	-0-	released
	î	4.80 -0-	0.02	0.020	released
			• •		

May 1991	Le		90 Electrof in inches a			ounds	Page A- 75
		1	6.93 -0) -	0.09	0.090	released
		1	7.87 -0) —	0.17	0.170	released
		1	9.84 -0)-	0.36	0.360	released
		1	10.16 -0) -	0.32	0.320	released
Total	Number	: 6	Number/hr:	5.8	Wt: 0.96	Wt/hr: 0	.923
Micropterus	salmoid	les					
largemouth b	oass				Total	Mean	
		Number	Length Ra	nge	Weight	Weight	Disposition
		1	5.67 -0)-	0.05	0.050	released
		1	8.54 -0	-	0.31	0.310	released
		1	10.63 -0	-	0.54	0.540	released
		14	11.50 -0	-	0.87	0.062	released
		1	11.65 -0) -	0.86	0.860	released
		ī	11.97 -0	ı -	1.00	1.000	released
		1	12.83 -0) -	1.07	1.070	released
		1	14.96 -0	-	1.85	1.850	released
		ī	15.00 -0	-	1.81	1.810	released '
		ī	15.39 -0		2.34	2.340	released
		ī	15.47 -0		1.95	1.950	released
		ī	16.54 -0) -	2.68	2.680	released
		ī	16.81 -0	-	2.95	2.950	released
		ī	16.85 -0		2.52	2.520	released
Total	Number	: 27	Number/hr:	26.0	Wt:20.80	Wt/hr:20	.000
Hiodon tergi	isus						
mooneye					Total	Mean	
		Number	Length Ra	nge	Weight	Weight	Disposition
		1	10.47 -0)-	0.34	0.340	preserved
Total	Number	: 1	Number/hr:	1.0	Wt: 0.34	Wt/hr: 0	.327
Stizostedior	canade	nse					1
sauger					Total	Mean	
adder		Number	Length Ra	nge	Weight	Weight	Disposition
		1	13.98 -0) -	8.80	8.800	released
Total	Number	: 1	Number/hr:	1.0	Wt: 8.80	Wt/hr: 8	.462
Moxostoma ma	croleni	dotum					
shorthead re					Total	Mean	
Dilot circua 10		Number	Length Ra	nge	Weight	Weight	*Disposition
		1	8.11 -0)-	0.19	0.190	released
Total	Number	: 1	Number/hr:	1.0	Wt: 0.19	Wt/hr: 0	. 183
Dorosoma pet							
threadfin sh					Total	Mean	
		Number	Length Ra	nge	Weight	Weight	Disposition
				_			

6

2.95

3.78

0.10

0.017

preserved

Total

Total	Number	: 6	Number/h	r: 5	.8 Wt: 0.10	Wt/hr:	0.096
Carpiodes c	yprinus					••	
quillback		Numb	er Length	Rang	Total e Weight	Mean Weight	Disposition
		1	11.65	-0-	0.75	0.750	released
Total	Number	: 1	Number/h	r: 1	.0 Wt: 0.75	Wt/hr:	0.721
Morone chry	sops						
white bass		Numb	er Length	Rang	Total e Weight	Mean Weight	Disposition
		1	4.88	-0-	0.04	0.040	released
		ī	11.65	-0-	0.79	0.790	released
		ī	11.89	-0-	0.91	0.910	released
		ī	12.01	-0-	0.81	0.810	released
		ī	12.95	-0-	1.08	1.080	released
		ī	13.27	-0-	1.14	1.140	released
		1	14.25	-0-	1.52	1.520	released
		1	14.80	-0-	1.67	1.670	released
Total	Number	r: 8	Number/h	r: 7	.7 Wt: 7.96	Wt/hr:	7.654
Pomoxis ann							
white crapp	ie	Numb	er Length	Rang	Total e Weight	Mean Weight	Disposition
		1	6,93	-0-	0.15	0.150	released
		1	10.75	-0-	0.73	0.730	released
Total	Number	r: 2	Number/h	r: 1	.9 Wt: 0.88	Wt/hr:	0.846
Morone miss	issippie	ensis					
yellow bass		Numb	er Length	Dan-	Total e Weight	Mean Weight	Disposition
		1	7.36	-0-	0.24	0.240	released

Number: 1 Number/hr: 1.0 Wt: 0.24 Wt/hr: 0.231

Total for 1990-27 Number:122 Number/hr:117.31 Wt: 1E2 Wt/hr:1.1E2

